FACT SHEET FOR INDUSTRIAL STORMWATER GENERAL PERMIT

SUMMARY

This fact sheet is a companion document to the revised National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities (Industrial Stormwater General Permit). The proposed permit authorizes discharge of stormwater only. Discharges of process water are not included under this permit and must be authorized under a separate permit. This fact sheet explains the nature of the discharges, Ecology's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions. Public involvement information is contained in Appendix A.

Ecology first issued its baseline stormwater general permit on November 18, 1992, covering both industrial and construction activities. When reissued in 1995, Ecology decided to move construction activities into a separate permit. The 1995 industrial stormwater general permit was reissued by Ecology on October 4, 2000 with an expiration date of November 18, 2005. Ecology is proposing to revoke that permit and reissue it effective July 5, 2002. The proposed permit would expire on July 5, 2007. This action is necessary to incorporate permit changes that provide a compliance pathway for facilities that previously did not require coverage. The compliance pathway must be available by March 10, 2003 as prescribed by the Environmental Protection Agency (EPA) Stormwater Phase 2 Regulations. Revising and reissuing the permit was also a condition of settling the appeal of the industrial stormwater general permit issued in October 2000.

The proposed permit includes some significant changes. The previous permit lacked easily available tangible evidence of how well facilities were managing stormwater. Only onsite visits provided this information. In order to provide tangible evidence that would be readily available to the public as well, Ecology has included monitoring and analysis of stormwater for a few representative pollutants in the proposed permit. The revised permit also clearly states that stormwater discharges must comply with standards and defines how a mixing zone may be applied to determine compliance with water quality standards. This fact sheet discusses these issues and the other significant regulatory requirements of the proposed permit.

This proposed general permit limits the discharge of pollutants to surface waters under the authority of the Federal Water Pollution Control Act (U.S.C.S. 1251) and limits the discharge of pollutants to surface and ground water under the authority of Chapter 90.48 RCW.

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System permit program (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW which defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

The regulations adopted by the State include procedures for issuing general permits (Chapter 173-226 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the proposed permit. One of the requirements (WAC 173-226-110) for issuing a general permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty days before the proposed permit is issued (WAC 173-226-130). The fact sheet and draft permit are available for review (see Appendix A--Public Involvement of the fact sheet for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of Ecology's response. The fact sheet will not be revised. Comments and the resultant changes to the proposed permit will be summarized in Appendix H--Response to Comments.

BACKGROUND INFORMATION

DESCRIPTION OF PERMIT COVERAGE

HISTORY

Ecology first issued its baseline stormwater general permit for stormwater discharges on November 18, 1992. The general permit covered both industrial and construction activities. When reissued in 1995, Ecology decided to take a limited approach due to time limitations and uncertainties on future stormwater permitting strategy. The minimal approach included issuing separate permits for industrial and construction activities, increasing the permit cycle to five years, and excluding mandatory effluent limits and sampling and analysis. Ecology considered the input of an advisory committee in developing the 1995 baseline general permit for stormwater discharges from industrial and construction activities. Ecology issued the Industrial Stormwater General Permit on November 18, 1995 with an expiration date of November 18, 2000.

As required by law, Ecology reissues NPDES permits every 5 years. Ecology reissued the industrial stormwater general permit on October 4, 2000. The permit, which became effective on November 18, 2000, had no substantive changes. Only changes that made the permit consistent with the revised timeframe were made. The reissued permit became effective on November 18, 2000 with an expiration date of November 18, 2005. However, Ecology fully intended to revise and replace this permit before the expiration date. That intention was fully disclosed in the fact sheet that accompanied the November 2000 permit:

> *"The existing stormwater general permit expires on November 18, 2000. It is critical that Ecology has a replacement permit in place when the industrial stormwater general permit expires. The November date however, did not work well for implementing the new requirements under "Phase II Storm Water Regulations" that were published by the Environmental Protection Agency (EPA) in December 1999. Implementation of permitting for municipal facilities that were exempt under EPA's 1990 regulations, for instance, is not required under Phase II until March 2003. In order to proceed as efficiently as possible and avoid doing the same work twice, Ecology decided to make revising and reissuing this permit a two step process:"*

The two step process included an immediate reissue without substantive changes followed by a thorough examination and revision of the permit. The intent was to reissue the permit before March 10, 2003.

A Notice of Appeal was filed on November 17, 2000 by Puget Soundkeeper Alliance, Waste Action Project, Washington Public Employees for Environmental Responsibility, Resources for Sustainable Communities, and Citizens for a Healthy Bay. The Association of Washington Business filed a motion to intervene and became party to the case. In response to the litigation, Ecology altered its approach to revising the permit. Ecology did not conduct an informal public process to examine stormwater issues associated with the reissued permit as intended. Ecology did examine the issues raised by the appeal, and issues and proposals made by parties to the appeal. Ecology also consulted with staff that are responsible for managing the coverage of

facilities under the permit. Revisions were made to address these issues and to implement EPA's Phase II Storm Water Regulations. Public comment will be received through the formal comment period as outlined in Appendix A – Public Involvement Process.

General Permit Approach

A general permit approach for industrial stormwater is an appropriate permitting approach for the following reasons:

- A general permit is the most efficient method to handle the large number of industrial stormwater permit applications;
- The application requirements for coverage under a general permit are far less rigorous than individual permit application requirements and hence more cost effective;
- A general permit is consistent with USEPA's four-tier permitting strategy, the purpose of which is to use the flexibility provided by the Clean Water Act in designing a workable and reasonable permitting system;
- A general permit is an efficient method to establish the essential regulatory requirements that are appropriate for a broad base of industrial activities;

A general permit is designed to provide coverage for a group of related facilities or operations of a specific industry type or group of industries. It is appropriate when the discharge characteristics are sufficiently similar and a standard set of permit requirements can effectively provide environmental protection and comply with water quality standards for discharges. In most cases the proposed general permit will provide sufficient and appropriate stormwater management requirements for discharges of stormwater from industrial sites.

Scope of Permit Coverage

The industrial stormwater general permit is a statewide permit that provides coverage for discharges of stormwater associated with many industrial activities within the State of Washington. Special Condition S1 defines which facilities are eligible for coverage under the proposed permit and Special Condition S2 provides the requirements for obtaining coverage. In general, coverage is required for industrial facilities that discharge stormwater to surface water or to a stormwater conveyance system that discharges to surface water unless the facility can demonstrate "no exposure" of industrial activities to stormwater. Appendix C of the fact sheet provides a complete list of those industrial groups that are categorically included for coverage. Facilities in other industrial categories or with groundwater only discharges may be considered for coverage on a case-by-case basis. As of March 27, 2002, 1297 facilities had coverage under the industrial stormwater general permit. Appendix D of the fact sheet provides a list of those facilities, sequenced by SIC code.

There is a significant change in coverage requirements for facilities that classify as "light industry" (see Appendix C). In the previous permit they were not required to apply for permit coverage if their only "stormwater discharge associated with industrial activity is drainage from roofs or other surfaces exposed to air emissions from a manufacturing building or a process area…" This is what was known as "no exposure" of industrial activities to stormwater and in

the original EPA development of the stormwater regulations, phase 1, “no exposure” only applied to light industry. The EPA in the phase 2 stormwater regulations revised the “no exposure” option to include all industrial activities. However, all facilities, including light industry, must submit a “no exposure” application to qualify for exemption from permit coverage. The proposed permit requires all those light industry facilities that were previously exempt from applying for permit coverage through “no exposure” to either apply for coverage or submit an application for “no exposure” within three months after the effective date of the permit.

Another significant change applies to industrial facilities owned or operated by municipalities with a population of less than 100,000. Based on EPA phase 1 stormwater regulations, the previous permit did not require these facilities to obtain coverage. These facilities are included in the EPA phase 2 stormwater regulations which require them to obtain a discharge permit by March 10, 2003. The proposed permit has implemented this requirement. Any previously exempt municipal facility that has an industrial activity identified by the permit for coverage (see Appendix C) and discharges to surface water must have permit coverage by March 10, 2003.

The proposed permit retains the language that expressly authorizes Ecology to regulate stormwater dischargers which are "significant contributors of pollutants" and which otherwise would not be permitted. The federal Clean Water Act at Section 402(p)(2)(E) gives the State of Washington (State) this authority as does the State mandate in chapter 90.48 RCW to protect waters of the state. Language was added to clarify that this provision does apply to facilities that discharge only to ground water when necessary to protect waters of the state.

Since a general permit is designed to provide environmental protection under conditions typical for the covered industrial groups, it will not be appropriate for every situation. Environmental protection cannot always be assured when site-specific conditions at a facility are not typical of the industrial group or pose environmental risks beyond the scope of the proposed general permit. The proposed permit does not guarantee coverage to all applicants based solely on their SIC code. Ecology can deny coverage under the general permit and require the application of an individual where site conditions warrant it.

In addition, Special Condition S1.C. identifies specific conditions where facilities are excluded from coverage under the proposed general permit and may require coverage under an individual permit. One exclusion applies to facilities subject to stormwater effluent limitation guidelines or new source performance standards as specified by the federal government in the code of federal regulations (CFR). In the previous permit all such facilities were excluded. In the proposed permit landfill facilities subject to stormwater effluent limits are included. The effluent limits were established February 2, 2000. There are landfill facilities with coverage under the industrial stormwater general permit that may be subject to the effluent limits. Rather than exclude them, the effluent limits have been added to the permit (see “Monitoring for Limits”, page 41). The permit also incorporates effluent guidelines for coal piles. All other facilities subject to stormwater effluent limitation guidelines will be excluded from coverage (see Appendix C). Special Condition S1.C.6.&7. exclude coverage of discharges where the general permit is not sufficient to assure compliance with other regulations governing water quality protection. This could include special protections for ground water recharge zones or limitations established through watershed management agreements. It could also include discharges to impaired waterbodies if the conditions included in the proposed permit are insufficient to assure

compliance with the legal requirements to protect these waters. These exclusions only apply at specific sites and under specific water quality requirements that are beyond the scope of the general permit. It is expected that most often the general permit will be appropriate and provide the necessary environmental protection.

Special Condition S2, Coverage Requirements, describes how to obtain coverage consistent with WAC 173-226-200. It explains public notice requirements, SEPA compliance and the effective date of coverage. There are some differences in application requirements for new facilities versus existing facilities. WAC 173-226-130 requires new operations and those under permit that are increasing or altering their discharge to notify the public of this intent in a newspaper of general circulation within the geographical area of the proposed discharge or change in discharge. Existing facilities (except those modifying their permit coverage) are not subject to that requirement. Chapter 173-226 WAC defines "new operation" as one that begins activities on or after the effective date of the permit. This has been applied in the proposed permit, defining existing facilities as those that were in operation prior to the 1995 permit effective date. Since facilities owned or operated by municipalities of less than 100,000 population were not subject to the permit in 1995, existing facilities for this category are defined in relation to the effective date of the proposed permit.

Existing facilities that have never been under permit for stormwater are provided with a compliance schedule to implement the permit requirements. This is a recognition that the facility is already in operation and that developing a satisfactory stormwater pollution prevention plan and implementing the plan requires time. This compliance schedule does not relieve the facility of any previous liability for discharging without a permit. Existing facilities that have been discharging stormwater in violation of applicable requirements for permit coverage may be subject to enforcement action.

On the effective date of the proposed permit, the current permit is revoked and replaced by the reissued permit. Facilities that have coverage under the existing industrial general permit will automatically be transferred to coverage under the revised permit, subject to the terms and conditions of the revised permit. This procedure is authorized under General Condition G8, General Permit Modification and Revocation, of the current permit and under WAC 173-226-230. The existing permit is being revoked and reissued to address significant issues that were raised through appeal of the existing permit and to implement the EPA stormwater phase 2 requirements in a timely fashion.

The permit requires applicants to submit their application for coverage at least 38 days before beginning operation or implementing a significant process change. This is the minimum amount of time that is legally required to issue coverage. The minimum amount of time is only possible when the applicant has submitted all the necessary paperwork, completed Public Notice, and there are no factors that require additional time such as a request for public hearing. Since the applicant is required to have permit coverage before they are authorized to discharge stormwater from an operating site, applicants should allow more time than 38 days. Issues such as discharging to impaired waters or environmentally sensitive waters are likely to add additional time to processing the application for coverage.

The permit requires facilities that currently have coverage to identify the waters that they discharge to by September 30, 2002. Ecology will mail the receiving waterbody form (see Appendix F) when the revised permit becomes effective. The purpose of this form is to assure that Ecology's data correctly identifies the receiving waterbody and the precise location of the point of discharge. This information is necessary to properly identify permit requirements related to impaired waterbodies.

REVIEW OF INDUSTRIAL GROUPS

The industrial stormwater general permit provides coverage for a broad range of industrial activities. The following discussion addresses groups of industrial activities that are related by "sources of potential pollutants". The groups are arranged alphabetically by a descriptive name for the group. The Standard Industrial Codes (SICs) that apply are also listed with the group name.

AIRFIELDS AND AIRCRAFT TRANSPORTATION AND MAINTENANCE - SIC: 4500

Description: Industrial activities include vehicle and equipment fueling, maintenance and cleaning, and aircraft/runway deicing.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 40 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Fueling is accomplished by tank trucks at the aircraft and is a source of spills. Dripping of fuel and engine fluids from the aircraft and at vehicle/equipment maintenance cleaning areas and the application of deicing materials to the aircraft and the runways are potential sources of stormwater contamination. Aircraft maintenance and cleaning produces a wide variety of waste products, similar to those found with any vehicle or equipment maintenance, including: used oil and cleaning solvents, paints, oil filters, soiled rags, and soapy wastewater. Deicing materials used on aircraft and/or runways include ethylene and propylene glycol, and urea. Other chemicals currently considered for ice control are sodium and potassium acetates, isopropyl alcohol, and sodium fluoride. Pollutant constituents include oil and grease, TSS, BOD, COD, TKN, pH and specific deicing components such as glycol and urea.

CEMENT – SIC: 3241

Description: These businesses produce Portland cement, the binder used in concrete for paving, buildings, pipe and other structural products. The three basic steps in cement manufacturing are: 1) proportioning, grinding, and blending raw materials; 2) heating raw materials to produce a hard, stony substance known as clinker; and 3) combining the clinker with other materials and grinding the mixture into a fine powdery form. The raw materials include limestone, silica, alumina, iron, chalk, oyster shell marl, or shale. Waste materials from other industries are often used such as slag, fly ash and spent blasting sand. Raw materials are crushed, mixed and heated in a kiln to produce the correct chemical composition. Kilns typically are coal, gas, or oil fired. The output of the kiln is a clinker that is ground to produce the final product.

The basic process may be wet or dry. In the wet process water is mixed with the raw ingredients in the initial crushing operation and in some cases is used to wash the material prior to use. Water may also be used in the air pollution control scrubber. The most significant waste material from cement production is the kiln dust. Concrete products may also be produced at ready-mix concrete facilities. Refer to "Concrete Products" for a description of the BMPs appropriate to these activities.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to one facility with primary activities falling under SIC 3241.

Sources of Potential Pollutants: Stormwater may be contaminated during the crushing, grinding, storage, and handling of kiln dust, limestone, shale, clay, coal, clinker, gypsum, anhydrite, slag, sand, and product and at the vehicle and equipment maintenance, fueling, and cleaning areas. Total suspended solids, aluminum, iron and other heavy metals, pH, COD, potassium, sulfate, and oil and grease are some of the potential pollutants. The following mean concentrations in stormwater discharges have been reported in the Environmental Protection Agency's (EPA's) multi-sector permit fact sheet (EPA, 1995): TSS=1067, COD=107.5, aluminum=72.6, iron=7.5, all in mg/L, and pH=2-12. These values may be useful in characterizing stormwater contaminants at cement manufacturing facilities.

CHEMICALS MANUFACTURING - SIC: 2800, 3861

Description: This group is engaged in the manufacture of chemicals, or products based on chemicals such as acids, alkalis, inks, chlorine, industrial gases, pigments, chemicals used in the production of synthetic resins, fibers and plastics, synthetic rubber, soaps and cleaners, pharmaceuticals, cosmetics, paints, varnishes, resins, photographic materials, chemicals, organic chemicals, agricultural chemicals, adhesives, sealants, and ink.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 67 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Activities that can contaminate stormwater include bagging, blending, packaging, crushing, milling, shredding, granulation, grinding, storage, distribution, loading/unloading, and processing of materials; equipment storage; application of fertilizers; foundries; lime application; use of machinery; material handling and warehousing; cooling towers; fueling; boilers; hazardous waste treatment, storage and disposal; wastewater treatment; plant yard areas of past industrial activity; access roads and tracks; drum washing, and maintenance and repair.

Chemical businesses in the Seattle area surveyed for Dangerous Wastes have been found to produce waste caustic solutions, soaps, heavy metal solutions, inorganic and organic chemicals, solvents, acids, alkalis, paints, varnishes, pharmaceuticals, and inks. The potential pollutants include BOD, TSS, COD, oil and grease, pH, total phosphorus, nitrates, nitrites, total Kjeldahl nitrogen, ammonia, specific organics, and heavy metals. EPA stormwater multi-sector permit fact sheet data includes the following mean values in mg/L except pH: BOD, 4.4-143.2; TSS, 35-493; COD, 42.36-245.3; Oil and Grease, 0.3-6.0; NO_2+NO_3, 0.3-35.9; TKN, 1.3-108.9; tot. P, 0.1-65.7; ammonia, 40.45-73.22; Al,

1.20-1.78; Cu, .12-19; Mn, .56-. 71; Zn, 1.74-2.11; Fe, 2.24-3.52 and pH, 3.5-10.4. This data could be helpful in characterizing stormwater pollutants at the facility.

CONCRETE PRODUCTS - SIC: 3270

Description: Businesses that manufacture ready-mix concrete, gypsum products, concrete blocks and bricks, concrete sewer or drainage pipe, septic tanks, and prestressed concrete building components. SIC 3273, Ready-Mixed Concrete, is not eligible for coverage under the industrial stormwater general permit and will typically be covered under the sand and gravel general permit. Concrete is prepared on-site and poured into molds or forms to produce the desired product. The basic ingredients of concrete are sand, gravel, Portland cement, crushed stone, clay, and reinforcing steel for some products. Admixtures including fly ash, calcium chloride, triethanolamine, lignosulfonic acid, sulfonated hydrocarbon, fatty acid glyceride, or vinyl acetate, which may be added to obtain desired characteristics such as slower or more rapid curing times.

The first stage in the manufacturing process is proportioning cement, aggregate, admixtures and water, and then transporting the product to a rotary drum, or pan mixer. The mixture is then fed into an automatic block-molding machine that rams, presses, or vibrates the mixture into its final form. The final product is then stacked on iron framework cars where it cures in four hours. After being mixed in a central mixer, concrete is molded in the same manner as concrete block. The concrete cures in the forms for a number of hours. Forms are washed for reuse, and the concrete products are stored until they can be shipped.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 19 facilities under this category, fifteen of which were facilities producing concrete products.

Sources of Potential Pollutants: Pollutant generating activities/sources include stockpiles; washing of waste concrete from trucks, forms, equipment, and the general work area; and water from the curing of concrete products. Besides the basic ingredients for making concrete products, chemicals used in the curing of concrete and the removal of forms may end up in stormwater. These chemicals can include latex sealants, bitumastic coatings and release agents. Trucks and equipment maintained on-site may generate waste oil and solvents, and other waste materials. Potential pollutants include TSS, COD, BOD, pH, lead, iron, zinc, and oil and grease.

ELECTRICAL PRODUCTS - SIC: 3600, 3800

Description: A variety of products are produced including electrical transformers and switchgear, motors, generators, relays, and industrial controls; communications equipment for radio and TV stations and systems; electronic components and accessories including semiconductors; printed board circuits; electromedical and electrotherapeutic apparatus; and electrical instrumentation. Manufacturing processes include electroplating, machining, fabricating, etching, sawing, grinding, welding, and parts cleaning. Materials used include metals, ceramics, quartz, silicon, inorganic oxides, acids, alkaline solutions, arsenides, phosphides, cyanides, oils, fuels, solvents, and other chemicals.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 16 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Pollutant generating activities/sources include bulk storage of raw materials, by-products or finished products; loading and unloading of liquid materials from truck or rail; temporary storage of waste oil and solvents from cleaning manufacturing equipment; used equipment temporarily stored on site that could drip oil and residual process materials; maintenance and repair of vehicles and equipment; and temporary storage of Dangerous Wastes.

Waste liquids which are sometimes stored outside include spent acetone and solvents, ferric chloride solutions, soldering fluxes mixed with thinner or alcohol, spent acids, and oily waste. Several of these liquid wastes contain chlorinated hydrocarbons, ammonium salts, and metals such as chromium, copper, lead, silver, zinc, nickel, and tin. Waste solids include soiled rags and sanding materials.

Wastewater consists of solutions and rinses from electroplating operations, and the wastewaters from cleaning operations. Water may also be used to cool saws and grinding machines. Sludges are produced by the wastewater treatment process. Potential pollutants include TSS, oil and grease, organics, pH, BOD, COD, Total Kjeldahl Nitrogen, Nitrate and Nitrite Nitrogen, copper, zinc, lead, and silver.

EQUIPMENT REPAIR - SIC: 7353, 7600

Description: This group includes several businesses that specialize in repairing different equipment including communications equipment, radio, TV, household appliances, and refrigeration systems. Also included are businesses that rent or lease heavy construction equipment as miscellaneous repair and maintenance may occur on site.

Existing Coverages: None of the SIC codes in this group are categorically required by the permit to obtain coverage. However, Ecology does require coverage for facilities determined to be significant contributors of pollutants as described in S1.E. of the permit, Coverage for Significant Contributors of Pollutants. As of November 28, 2001, Ecology had issued coverage to one facility under this group.

Sources of Potential Pollutants: Potential pollutant sources include storage and handling of fuels, waste oils and solvents, and loading/unloading areas. Potential pollutants include oil and grease, low/high pH, and suspended solids.

FLEET VEHICLE YARDS - SIC: 4100, 4210, 4230, 7381/2, 7510

Description: Includes all businesses which own, operate and maintain or repair large vehicle fleets, including cars, buses, trucks and taxis, as well as the renting or leasing of cars, trucks, and trailers.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 152 facilities with primary activities falling under this group.

Sources of Potential Pollutants:

1. Spills/leaks of fuels, used oils, oil filters, antifreeze, solvents, brake fluid, and batteries, sulfuric acid, battery acid sludge, and leaching from empty contaminated containers and soiled rags.

2. Leaking underground storage tanks that can cause ground water contamination and is a safety hazard.

3. Dirt, oils and greases from outside steam cleaning and vehicle washing.

4. Dripping of liquids from parked vehicles.

5. Solid and liquid wastes (noted above) that are not properly stored while awaiting disposal or recycling.

6. Loading and unloading area.

FOOD PRODUCTS - SIC: 2000

Description: Businesses in this category include meat packing plants, poultry slaughtering and processing, sausage and prepared meats, dairy products, preserved fruits and vegetables, flour, bakery products, sugar and confectioneries, vegetable and animal oils, beverages, canned, frozen or fresh fish, pasta products, snack foods, and manufactured ice. Food processing typically occurs inside buildings. Exceptions are meat packing plants where live animals may be kept outside, and fruit and vegetable plants where the raw material may be temporarily stored outside. Meat production facilities include stockyards, slaughtering, cutting and deboning, meat processing, rendering, and materials recovery. Dairy production facilities include receiving stations, clarification, separation, and pasteurization followed by culturing, churning, pressing, curing, blending, condensing, sweetening, drying, milling, and packaging. Canned frozen and preserved fruits and vegetables are typically produced by washing, cutting, blanching, and cooking followed by drying, dehydrating, and freezing.

Grain mill products are processed during washing, milling, debranning, heat treatment, screening, shaping, and vitamin and mineral supplementing. Bakery products processing includes mixing, shaping, of dough, cooling, and decorating. Operations at an edible oil manufacturer include refining, bleaching, hydrogenation, fractionation, emulsification, deodorization, filtration, and blending. Beverage production includes brewing, distilling, fermentation, blending, and packaging. Wine processors often crush grapes outside the process building and/or store equipment outside when not in use. Some wine producers use juice from grapes crushed elsewhere. Some vegetable and fruit processing plants use caustic solutions.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 74 facilities with primary activities falling under SIC 2000.

Sources of Potential Pollutants: The following are potential stormwater pollutant causing activities/sources: loading/unloading of materials, equipment/vehicle maintenance, liquid

storage in tanks and drums, air emissions (ovens, vents), solid wastes handling and storage, wastewater treatment, pest control, animal containment and transit, and vegetable storage. Materials exposed to stormwater include acids, ammonia, activated carbon, bleach, blood, bone meal, brewing residuals, caustic soda, chlorine, coke oven tar, detergents, eggs, feathers, feed, ferric chloride, fruits, vegetables, coffee beans, gel bone, grain, hides, lard, manure, milk, salts, skim powder, starch, sugar, tallow, ethyl alcohol, oils, fats, whey, yeast, and wastes. The following are the pollutants typically expected from this industry segment: BOD, TSS, Oil and Grease, pH, Kjeldahl Nitrogen, copper, manganese, fecal coliform, and pesticides.

GLASS PRODUCTS - SIC: 3210, 3220, 3230

Description: The glass form produced may be flat or window glass, safety glass, or container glass, tubing, glass wool, or fibers. The raw materials are sand mixed with a variety of oxides such as aluminum, antimony, arsenic, lead, copper, cobalt oxide, and barium. The raw materials are mixed and heated in a furnace. Processes that vary with the intended product, shape the resulting molten material. The cooled glass may be edged, ground, polished, annealed and/or heat-treated to produce the final product. Air emissions from the manufacturing buildings are scrubbed to remove particulates.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 8 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Raw materials are generally stored in silos except for crushed recycled glass and materials washed off recycled glass. Contamination of stormwater and/or ground water can be caused by raw materials lost during unloading operations, errant flue dust, equipment/vehicle maintenance and engine fluids from mobile lifting equipment that is stored outside. The maintenance of the manufacturing equipment will produce waste lubricants and cleaning solvents. The flue dust is likely to contain heavy metals such as arsenic, cadmium, chromium, mercury, and lead. Potential pollutants include suspended solids, oil and grease, high/low pH, and heavy metals such as arsenic, cadmium, chromium, mercury, and lead.

HAZARDOUS WASTE SITES

Description: Hazardous waste treatment, storage, and disposal facilities fall under this group. It includes those sites that are operating under interim status or a permit under Subtitle C of RCRA. Hazardous wastes are generally stored in containers and tanks, which are enclosed by a bermed area to prevent any releases to the environment from the storage units. Hazardous waste disposal units include landfills, surface impoundments, waste piles, and land treatment units. The processes for treating hazardous wastes can be divided into two major categories based on whether the waste is organic or inorganic in nature. Organic wastes are treated by destructive technologies, like incineration, whereas inorganic wastes are treated using fixation technologies, like stabilization, in which the hazardous constituents are immobilized in the residual matrix. Residuals from fixation processes are usually land-disposed where the stabilized constituents are much less likely to leach into the environment.

Existing Coverages: As of November 28, 2001, there were no facilities under this group with permit coverage.

Sources of Potential Pollutants: Pollutants in stormwater discharges from hazardous waste treatment, storage, and disposal facilities may include hazardous wastes and/or their constituents if spills or leaks are not properly contained or cleaned up. 40 CFR Part 261 Subpart D contains the lists of hazardous wastes, and Appendix VII to Part 261 is a list of the hazardous constituents for which each of these wastes is listed. The EPA has reviewed this industrial group and established effluent limits based on available technology for pollution prevention and treatment of wastewater. Contaminated stormwater is regulated under these effluent limits and includes the following parameters: BOD_5, TSS, Ammonia, α-Terpineol, Aniline, Benzoic acid, Naphthalene, ρ-Cresol, Phenol, Pyridine, Arsenic, Chromium, Zinc, and pH.

INDUSTRIAL MACHINERY AND EQUIPMENT, TRUCKS AND TRAILERS, AIRCRAFT, AEROSPACE, AND RAILROAD - SIC: 3500, 3713/14, 3720, 3740, 3760, 3800

Description: This category includes the manufacture of a variety of equipment including engines and turbines, farm and garden equipment, construction and mining machinery, metal working machinery, pumps, computers and office equipment, automatic vending machines, refrigeration and heating equipment, and equipment for the manufacturing industries. This group also includes many small machine shops, and the manufacturing of trucks, trailers and parts, airplanes and parts, missiles, spacecraft, and railroad equipment and instruments.

Manufacturing processes include various forms of metal working and finishing, such as electroplating, anodizing, chemical conversion coating, etching, chemical milling, cleaning, machining, grinding, polishing, sand blasting, laminating, hot dip coating, descaling, degreasing, paint stripping, painting, and the production of plastic and fiberglass parts. Raw materials include ferrous and non-ferrous metals, such as aluminum, copper, iron, steel, and their alloys, paints, solvents, acids, alkalis, fuels, lubricating and cutting oils, and plastics.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 71 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Potential pollutant sources include fuel islands, maintenance shops, loading/unloading of materials, and outside storage of gasoline, diesel, cleaning fluids, equipment, solvents, paints, wastes, detergents, acids, other chemicals, oils, metals, and scrap materials. Air emissions from stacks and ventilation systems are potential areas for exposure of materials to rain water.

LANDFILLS

Description: This group includes landfills, land application sites, and open dumps that receive or have received industrial waste. Since operation of an open dump is prohibited under RCRA Section 4004, inclusion of this activity is moot. Subtitle D of the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 257, defines landfills as areas of land or excavation in which wastes are placed for permanent disposal, and that are not

land application units, surface impoundments, injection wells, or waste piles. Included in this definition are municipal solid waste landfills and industrial solid nonhazardous waste landfills. Land application sites are defined as facilities at which wastes are applied onto or incorporated into the soil surface for the purpose of beneficial use or waste treatment and disposal.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 36 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Extensive land disturbance activities often associated with landfill operations expose soil to stormwater and can easily result in contaminating stormwater with suspended solids. Application of fertilizers, pesticides, and herbicides at the site can result in stormwater contamination. Exposure of waste at the open face of the landfill, residual from leachate leaks, leaks from machinery and vehicles provide additional opportunities to contaminate stormwater. The EPA has reviewed this industrial group and established effluent limits based on available technology for pollution prevention and treatment of wastewater. Contaminated stormwater is regulated under these effluent limits and includes the following parameters: BOD_5, TSS, Ammonia, α-Terpineol, Benzoic acid, ρ-Cresol, Phenol, Zinc, and pH.

METAL PRODUCTS - SIC: 2514, 2522, 2542, 3312, 3314-17, 3320, 3330, 3340, 3350, 3360, 3390, 3400, 3590

Description: This group includes mills that produce basic metals and primary products, as well as foundries, electroplaters, and fabricators of final metal products. Basic metal production includes steel, copper, and aluminum. Mills that transform metal billets, either ferrous or nonferrous such as aluminum, to primary metal products are included. Primary metal forms include sheets, flat bar, building components such as columns, beams and concrete reinforcing bar, and large pipe.

Steel mills in the Pacific Northwest use recycled metal and electric furnaces. The molten steel is cast into billets or ingots that may be reformed on site or taken to rolling mills that produce primary products. As iron and steel billets may sit outside before reforming, surface treatment to remove scale may occur prior to reforming. Foundries pour or inject molten metal into a mold to produce a shape that cannot be readily formed by other processes. The metal is first melted in a furnace. The mold is made of sand or metal die blocks that are locked together to make a complete cavity. The molten metal is ladled in and the mold is cooled. The rough product is finished by quenching, cleaning and chemical treatment. Quenching involves immersion in a plain water bath or water with an additive.

Businesses that fabricate metal products from metal stock provide a wide range of products. The raw stock is manipulated in a variety of ways including machining of various types, grinding, heating, shearing, deformation, cutting and welding, soldering, sand blasting, brazing, and laminating. Fabricators may first clean the metal by sand blasting, descaling, or solvent degreasing. Final finishing may involve electroplating, painting, or direct plating by fusing or vacuum metalizing. Raw materials, in particular

recycled metal, are stored outside prior to use, as are billets before reforming. The descaling process may use salt baths, sodium hydroxide, or acid (pickling).

Primary products often receive a surface coating treatment. Prior to the coating the product surface may be prepared by acid pickling to remove scale or alkaline cleaning to remove oils and greases. The two major classes of metallic coating operations are hot and cold coating. Zinc, tin and aluminum coatings are applied in molten metal baths. Tin and chromium are usually applied electrolytically from plating solutions.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 146 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Potential pollutant generating sources include outside storage of chemicals, metal feedstock, byproducts (fluxes), finished products, fuels, lubricants, waste oil, sludge, waste solvents, Dangerous Wastes, piles of coal, coke, dusts, fly ash, baghouse waste, slag, dross, sludges, sand refractory rubble, and machining waste; unloading of chemical feedstock and loading of waste liquids such as spent pickle liquor by truck or rail; material handling equipment such as cranes, conveyors, trucks, and forklifts; particulate emissions from scrubbers, baghouses or electrostatic precipitators; fugitive emissions; maintenance shops; erosion of soil from plant yards; and floor, sink, and process wastewater drains.

Based on EPA's multi-sector industrial stormwater permit/fact sheet the following are ranges of mean composite/grab pollutant concentrations from this industrial group (values are in mg/L except pH): BOD at 34.1/32.2; COD at 109.8/221.3; NO_2+NO_3 N at 1.38/1.17; TKN at 3.05/3.56; Oil and grease at 8.88 (grab); pH at 2.6-10.3 (range-grab); total phosphorus at .52/1.25; TSS at 162/368; copper at 2.28/3.53; lead at .19/. 79; zinc at 6.60/8.90; aluminum at 2.6/4.8; iron at 32.30/45.97; cadmium at 0.015/0.074; chromium at 2.2/5.053; nickel at 0.75/0.7; manganese at .59/.68; ammonia at .55/.85; and pyrene at .01/.06.

MINING ACTIVITIES – SIC: 1000, 1200, 1300, 1400

Description: This group includes metal mining activities, coal mining activities (inactive sites only), oil and gas extraction and refining, and mineral mining activities not covered under the Sand and Gravel General Permit.

SIC code 1000 includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals (ores). This group also includes all ore dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. Common activities at these mills include: crushing, grinding, and separation by gravity concentration, magnetic separation, electrostatic separation, flotation, or leaching.

SIC code 1200 only includes stormwater discharges associated with industrial activities from inactive[1] coal mines and from access roads, haul roads, and rail lines at active coal

[1]Inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator.

mines. The following types of operations are included: bituminous coal and lignite surface mining (SIC 1221); bituminous coal underground mining (SIC 1222); anthracite mining (SIC 1231); and coal mining services (SIC 1241).

SIC 1300 only includes those oil and gas facilities that discharge `contaminated' stormwater. For oil and gas facilities, contamination means that there has been a release of a Reportable Quantity (RQ) of oil or hazardous substances in storm water since November 16, 1987. Industrial activities include oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products, or waste products located on the site of such operations.

SIC 1400 includes stormwater discharges associated with industrial activities from active and inactive mineral mining and processing facilities. Mineral mining and processing facilities (SIC 1400) that may be covered under the industrial stormwater general permit include the following types of operations: Potash, Soda, and Borate Minerals (SIC Code 1474); Phosphate Rock (SIC Code 1475); and Chemical and Fertilizer Mineral Mining (SIC Code 1479). The following are covered under the Sand and Gravel General Permit and typically will not be eligible for coverage under the industrial stormwater general permit: Dimension Stone (SIC Code 1411); Crushed and Broken Limestone (SIC Code 1422); Crushed and Broken Granite (SIC Code 1423); Crushed and Broken Stone (SIC Code 1429); Construction Sand and Gravel (SIC Code 1442); Industrial Sand and Gravel (SIC Code 1446); Kaolin and Ball Clay (SIC Code 1455); Clay, Ceramic, and Refractory Minerals (SIC Code 1459); and Miscellaneous Nonmetallic Minerals, Except Fuels (SIC Code 1499).

Existing Coverages: Most industrial activities that fall under SIC 1400 are covered under the sand and gravel general permit and are not eligible for coverage under the industrial stormwater general permit. As of November 28, 2001, Ecology had issued coverage to three facilities with primary activities falling under SIC 1000, one facility under SIC 1200, no facilities under SIC 1300, and two facilities under SIC 1400.

Sources of Potential Pollutants: These activities often include disturbing the soil surface and exposing new material to stormwater. This can result in stormwater discharges contaminated with suspended solids, dissolved solids, altered pH, and increased turbidity. Heavy equipment, fueling and maintenance is typically associated with these activities and can result in stormwater contamination from petroleum products.

PAPER AND PULP - SIC: 2610, 2620, 2630

Description: Large industrial complexes in which pulp and/or paper, and/or paperboard are produced. Products also include newsprint, bleached paper, glassine, tissue paper, vegetable parchment, and industrial papers. Raw materials include; wood logs, chips, wastepaper, jute, hemp, rags, cotton linters, bagasse, and esparto. The chips for pulping may be produced on-site from logs, and/or imported.

The following manufacturing processes are typically used: raw material preparation, pulping, bleaching, and papermaking. All of these operations use a wide variety of

chemicals including caustic soda, sodium and ammonium sulfites, chlorine, titanium oxide, starches, solvents, adhesives, biocides, hydraulic oils, lubricants, dyes, and many chemical additives.

Existing Coverages: Typically pulp and paper mills have individual permits that include stormwater discharges as well as process wastewater. As of November 28, 2001, Ecology had issued coverage to one facility with primary activities falling under SIC 2631 and two facilities with primary activities under SIC 2611.

Sources of Potential Pollutants: The large process equipment used for pulping is not enclosed. Thus, precipitation falling over these areas may become contaminated. Maintenance of the process equipment produces waste products similar to that produced from vehicle and mobile equipment maintenance. Logs may be stored, debarked and chipped on site. Large quantities of chips are stored outside. Although this can be a source of pollution, the volume of stormwater flow is relatively small because the chip pile retains the majority of the precipitation. Mobile equipment such as forklifts, log stackers, and chip dozers are sources of leaks/spills of hydraulic fluids. Vehicles and equipment are fueled and maintained on-site.

PAPER PRODUCTS - SIC: 2650, 2670

Description: Included are businesses that take paper stock and produce basic paper products such as cardboard boxes and other containers, and stationery products such as envelopes and bond paper. Wood chips, pulp, and paper can be used as feedstock.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 19 facilities with primary activities falling under SIC 2650 or 2670.

Sources of Potential Pollutants: The following are potential pollutant sources:

1. Outside loading/unloading of solid and liquid materials.
2. Outside storage and handling of dangerous wastes, and other liquid and solid materials.
3. Maintenance and fueling activities.
4. Outside processing activities comparable to Pulp and Paper processing in preceding section.

PETROLEUM PRODUCTS - SIC: 2900

Description: The petroleum refining industry manufactures gasoline, kerosene, distillate and residual oils, lubricants and related products from crude petroleum, and asphalt paving and roofing materials. Although petroleum is the primary raw material, petroleum refineries also use other materials such as natural gas, benzene, toluene, chemical catalysts, caustic soda, and sulfuric acid. Wastes may include filter clays, spent catalysts, sludges, and oily water.

Asphalt paving products consist of sand, gravel and petroleum-based asphalt that serves as the binder. Raw materials include stockpiles of sand and gravel and asphalt emulsions stored in aboveground tanks.

Existing Coverages: Asphalt paving products, SIC 2951, are typically included under the sand and gravel general permit and not under the industrial stormwater general permit. As of November 28, 2001, Ecology had issued coverage to 8 facilities with primary activities falling under SIC 2900.

Sources of Potential Pollutants:

- Outside processing such as distillation, fractionation, catalytic cracking, solvent extraction, coking, desulfuring, reforming, and desalting.
- Petrochemical and fuel storage and handling.
- Outside liquid chemical piping and tankage.
- Mobile liquid handling equipment such as tank trucks, forklifts, etc.
- Maintenance and parking of trucks and other equipment.
- Waste Piles, and handling and storage of asphalt emulsions, cleaning chemicals, and solvents.
- Waste treatment and conveyance systems.

The following are potential pollutants at oil refineries: oil and grease, BOD5, COD, TOC, phenolic compounds, PAH, ammonia nitrogen, TKN, sulfides, TSS, low and high pH, and chromium (total and hexavalent).

PRINTING - SIC: 2700

Description: This industrial category includes the production of newspapers, periodicals, commercial printing materials and businesses that do their own printing and those that perform services for the printing industry, for example bookbinding. Processes include typesetting, engraving, photoengraving, and electrotyping.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to three facilities with primary activities falling under SIC 2700, Printing.

Sources of Potential Pollutants: Various materials used in modifying the paper stock include inorganic and organic acids, resins, solvents, polyester film, developers, alcohol, vinyl lacquer, dyes, acetates, and polymers. Waste products may include waste inks and ink sludge, resins, photographic chemicals, solvents, acid and alkaline solutions, chlorides, chromium, zinc, lead, spent formaldehyde, silver, plasticizers, and used lubricating oils. As the printing operations occur indoors, the only likely points of potential contact with stormwater are the outside temporary storage of waste materials, offloading of chemicals at external unloading bays, and vehicle/equipment repair and maintenance. Pollutants of concern include TSS, pH, heavy metals, oil and grease, and COD.

PROFESSIONAL SERVICES - SIC: 6000, 7000 AND 8000, 8060, 8070 NOT LISTED ELSEWHERE

Description: This service businesses group includes theaters, hotels/motels, finance, banking, hospitals, medical/dental laboratories, medical services, nursing homes,

schools/universities, and legal, financial and engineering services. Stormwater from parking lots will contain undesirable concentrations of oil and grease, suspended particulates, and metals such as lead, cadmium and zinc. Dangerous wastes might be generated at hospitals, nursing homes and other medical services.

Existing Coverages: None of the SIC codes in this group are categorically required by the permit to obtain coverage. However, Ecology does require coverage for facilities determined to be significant contributors of pollutants as described in S1.E. of the permit, Coverage for Significant Contributors of Pollutants. As of November 28, 2001, Ecology had issued coverage to two facilities from this group.

Sources of Potential Pollutants: The primary concern is runoff from high use parking areas, maintenance shops, and storage and handling of dangerous wastes.

RAILROADS - SIC: 4011, 4013

Description: Railroad activities are spread over a large geographic area: along railroad lines, in switching yards, and in maintenance yards. Railroad activity occurs on both property owned or leased by the railroad and at the loading or unloading facilities of its customers. Employing BMPs at commercial or public loading and unloading areas is the responsibility of the particular property owner.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 17 facilities with primary activities falling under SIC 4011 or 4013.

Sources of Potential Pollutants: The following are potential sources of pollutants: dripping of vehicle fluids onto the road bed, leaching of wood preservatives from the railroad ties, human waste disposal, litter, locomotive sanding areas, locomotive/railcar/equipment cleaning areas, fueling areas, outside material storage areas, the erosion and loss of soil particles from the bed, and herbicides used for vegetation management.

Maintenance activities include maintenance shops for vehicles and equipment, track maintenance, and ditch cleaning. In addition to the railroad stock, the maintenance shops service highway vehicles and other types of equipment. Waste materials can include waste oil, solvents, degreasers, antifreeze, radiator flush, acid solutions, brake fluids, soiled rags, oil filters, sulfuric acid and battery sludge, and machine chips with residual machining oil and any toxic fluids or solids lost during transit. The following are potential pollutants at railyards: Oil and grease, TSS, BOD, organics, pesticides, and heavy metals.

RETAIL/WHOLESALE VEHICLE AND EQUIPMENT DEALERS - SIC: 5010, 5080, AND 5500, 7510 EXCLUDING FUELING STATIONS (5540)

Description: This group includes all retail and wholesale businesses that sell, rent, or lease cars, trucks, boats, trailers, mobile homes, motorcycles and recreational vehicles. It includes both new and used vehicle dealers. It also includes sellers of heavy equipment for construction, farming, and industry. With the exception of motorcycle dealers, these

businesses have large parking lots. Most retail dealers that sell new vehicles and large equipment also provide repair and maintenance services.

Existing Coverages: None of the SIC codes in this group are categorically required by the permit to obtain coverage. However, Ecology does require coverage for facilities determined to be significant contributors of pollutants as described in S1.E. of the permit, Coverage for Significant Contributors of Pollutants. As of November 28, 2001, Ecology had issued coverage to one facility from this group.

Sources of Potential Pollutants: Oil and other materials that have dripped from parked vehicles can contaminate stormwater at high-use parking areas. Vehicles are washed regularly generating vehicle grime and detergent pollutants. The storm or washwater runoff will contain oils and various organics, metals, and phosphorus. Repair and maintenance services generate a variety of waste liquids and solids including used oils and engine fluids, solvents, waste paint, soiled rags, and dirty used engine parts. Many of these materials are Dangerous Wastes.

RETAIL/WHOLESALE NURSERIES AND BUILDING MATERIALS - SIC: 5030, 5198, 5210, 5230, AND 5260

Description: These businesses are placed in a separate group because they are likely to store much of their merchandise outside of the main building. They include nurseries, and businesses that sell building and construction materials and equipment, paint (5198, 5230) and hardware.

Existing Coverages: None of the SIC codes in this group are categorically required by the permit to obtain coverage. However, Ecology does require coverage for facilities determined to be significant contributors of pollutants, as described in S1.E. of the permit, Coverage for Significant Contributors of Pollutants. As of November 28, 2001, Ecology had issued coverage to 6 facilities from this group.

Sources of Potential Pollutants: Some businesses may have small fueling capabilities for forklifts and may also maintain and repair their vehicles and equipment. Some businesses may have unpaved areas, with the potential to contaminate stormwater by leaching of nutrients, pesticides, and herbicides. Businesses in this group surveyed in the Puget Sound area for Dangerous Wastes were found to produce waste solvents, paints and used oil. Storm runoff from exposed storage areas can contain suspended solids, and oil and grease from vehicles and forklifts and high-use customer parking lots, and other pollutants. Runoff from nurseries may contain nutrients, pesticides and/or herbicides.

RUBBER AND PLASTIC PRODUCTS - SIC: 3000

Description: Although different in basic feedstock and processes used, businesses that produce rubber, fiberglass and plastic products belong to the same SIC group. Products in this category include rubber tires, hoses, belts, gaskets, seals; and plastic sheet, film, tubes, pipes, bottles, cups, ice chests, packaging materials, and plumbing fixtures. The rubber and plastics industries use a variety of processes ranging from polymerization to extrusion using natural or synthetic raw materials. These industries use natural or

synthetic rubber, plastics components, pigments, adhesives, resins, acids, caustic soda, zinc, paints, fillers, and curing agents.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 45 facilities with primary activities falling under SIC 3000.

Sources of Potential Pollutants: Pollutant generating sources/activities include storage of liquids, other raw materials or by-products, scrap materials, oils, solvents, inks and paints; unloading of liquid materials from trucks or rail cars; washing of equipment; waste oil and solvents produced by cleaning manufacturing equipment; used equipment that could drip oil and residual process materials; and maintenance shops.

Based on data in EPA's multi-sector permit fact sheet the following are mean pollutant concentrations in mg/L, except for pH (unitless) and 1,1,1 trichloroethane, methylene chloride, toluene, zinc, oil/grease which are min.-max. grab sample values: BOD at 11.21-13.92, COD at 72.08-100.0, $NO_3 + NO_2$ Nitrogen at 86-1.26, TKN at 1.55-2.34, total phosphorus at .34-.41, TSS at 119.32-188.55, pH range of 2.56-10.1, trichloroethane at 0.00-0.38, methylene chloride at 0.00-13.0, toluene at 0.00-3.8, zinc at .011-7.60 and oil and grease at 0.0-91.0. These data may be helpful in characterizing potential stormwater pollutants.

SHIP AND BOAT BUILDING AND REPAIR YARDS - SIC: 3730

Description: Businesses that build or repair ships and boats. Typical activities include hull scraping, sandblasting, finishing, metal fabrication, electrical repairs, engine overhaul, and welding, fiberglass repairs, hydroblasting and steam cleaning. Most of these facilities will be covered under the Boatyard General Permit.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 20 facilities listing SIC 3731 or 3732 as their primary activity. Although most facilities are under the boatyard general permit, some with individual permits for process water or whose industrial activities are completely indoors, have coverage for stormwater discharges under the industrial stormwater general permit.

Sources of Potential Pollutants: Outside boatyard activities that can be sources of stormwater pollution include pressure washing, surface preparation, paint removal, sanding, painting, engine/vessel maintenance and repairs, and material handling and storage.

Secondary sources of stormwater contaminants are cooling water, pump testing, gray water, sanitary waste, washing down the work area, and engine bilge water. Engine room bilge water and oily wastes are typically collected and disposed of through a licensed contracted disposal company. Two prime sources of copper are leaching of copper from anti-fouling paint and wastes from hull maintenance. Wastes generated by boatyard activities include spent abrasive grits, spent solvent, spent oils, fuel, ethylene glycol, washwater, paint overspray, various cleaners/detergents and anti-corrosive compounds, paint chips, scrap metal, welding rods, wood, plastic, resins, glass fibers, dust, and miscellaneous trash such as paper and glass.

Ecology, local shipyards, and METRO have sampled pressure wash wastewater. The effluent quality has been variable and frequently exceeds water quality criteria for copper, lead, tin, and zinc. From monitoring results received to date, metal concentrations typically range from 5 to 10 mg/L, but have gone as high as 190 mg/L copper with an average 55 mg/L copper.

STEAM ELECTRIC POWER GENERATING FACILITIES

Description: The steam electric power generating category includes facilities which are coal, oil, gas, or nuclear fired. Heat captured co-generation facilities are not covered under the definition of stormwater discharge associated with industrial activity, however, dual fuel co-generation facilities are included in the definition. The production of electrical energy always involves the conversion of some other form of energy. The two most important sources of energy which are converted to steam electric energy are the chemical energy of fossil fuels and the atomic energy of nuclear fuels. Current uses of fossil fuels are based on a combustion process, followed by steam generation to convert the heat first into mechanical energy and then to convert the mechanical energy into electrical energy. Nuclear power plants utilize a cycle similar to that used in fossil fueled power plants except that the source of heat is atomic interactions rather than the combustion of fossil fuel. Common industrial activities at steam electric power generating facilities include the unloading, transport, and storage of raw materials, and the disposal of waste materials.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 4 facilities with primary activities falling under this group.

Sources of Potential Pollutants: Industrial activities that may result in contamination of stormwater include: discharges from industrial plant yards; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. Potential pollutants include: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; fertilizers; pesticides; and waste products such as ashes, slag, and sludge. Significant materials commonly found at steam electric power generating facilities include: coal; diesel fuel; and waste materials. The primary and largest potential source of storm water pollutants from fossil-fueled steam electric generating facilities is ash refuse piles. Few if any significant materials are exposed to storm water at nuclear powered steam electric facilities. The materials that are exposed to stormwater are office wastes and ground maintenance equipment and tools.

VEHICLE RECYCLERS AND SCRAP YARDS - SIC: 5093, 5015

Description: SIC 5093 includes establishments engaged in assembling, breaking up, sorting and the wholesale distribution of scrap and recyclable waste materials including bag, bottle and box wastes, fur cuttings, iron and steel scrap, metal and nonferrous metal scrap, oil, plastics, rags, rubber, textiles, waste paper, aluminum and tin cans, and rag

wastes. SIC 5015 includes facilities engaged in the dismantling of used motor vehicles for the purpose of selling parts.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 55 facilities listing SIC 5093 as their primary activity and 59 facilities listing SIC 5015 as their primary activity.

Sources of Potential Pollutants: Potential sources of pollutants at vehicle recycler facilities include engines, transmissions, radiators, batteries, brakes, power steering units, and differential gears which contain fluids. Scrap yards provide additional sources of pollutants depending on the materials recycled. Dismantling, processing, and storage all have potential to contaminate stormwater. Outside storage of materials is likely to result in contamination of stormwater. Potential pollutants include: a wide variety of petroleum products (e.g. oil and grease, gasoline, hydraulic fluid, solvents), total suspended solids, turbidity, biological oxygen demand, nutrients, metals, anti-freeze, and acids/bases.

WAREHOUSES AND MINI-WAREHOUSES - SIC: 4220

Description: Businesses that store goods in buildings and other structures.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 40 facilities listing 4220 as their primary SIC.

Sources of Potential Pollutants: The following are potential pollutant sources from warehousing operations: Loading and unloading areas, outside storage of materials and equipment, fueling and maintenance areas. Potential pollutants include oil and grease and TSS.

WOOD - SIC 2410, 2420, 2450, 2434, 2490, 2511/12, 2517, 2519, 2521, 2541

Description: This group includes sawmills, log storage, and all businesses that make wood products using cut wood, with the exception of wood treatment businesses. Included in this group are log yards, chip/bark piles, planing mills, millworks, and businesses that make wooden containers and prefab building components, mobile homes, and glued-wood products like laminated beams, as well as office and home furniture, partitions, and cabinets. All businesses employ cutting equipment whose by-products are chips and sawdust. Finishing is conducted in many operations.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 214 facilities falling under SIC 2400, lumber and wood products. This is a diverse group but the majority of permit coverages are for log yards (SIC 2411), sawmills and planing mills (SIC 2421), and millwork, veneer, plywood, and structural wood (SIC 2430).

Sources of Potential Pollutants: Businesses may have operations that use paints, solvents, wax emulsions, melamine formaldehyde and other thermosetting resins, and produce waste paints and paint thinners, turpentine, shellac, varnishes and other waste liquids. Outside storage, trucking, and handling of these materials can also be pollutant sources.

Potential pollutants reported in EPA's draft multi-sector permit/fact sheet (U.S. EPA, 1995) include the following (all are grab/composite mean values, in mg/L, except for oil and grease and pH): BOD at 39.6/45.4, COD at 297.6/242.5, NO3 + NO2-N at 0.95/0.75, TKN at 2.57/2.32, Tot. Phosphorus at 23.91/6.29; TSS at 1108/575, arsenic at .025/.028, copper at .047/.041, total phenols at .02/.007, oil and grease at 15.2, and pH at 3.6. These data may help in characterizing the potential stormwater pollutants at the facility.

WOOD TREATMENT - SIC: 2491

Not eligible for coverage under the industrial stormwater general permit. Ecology has determined that the industrial stormwater general permit is not appropriate for this industrial group and authorization for stormwater discharge must be by an individual permit.

OTHER MANUFACTURING BUSINESSES - SIC: 2200, 2300, 2873/74, 3100, 3200, 3250-69, 3280, 3290

Description: Includes manufacturing of textiles and apparel, agricultural fertilizers, leather products, clay products such as bricks, pottery, bathroom fixtures; and nonmetallic mineral products.

Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 16 facilities within this category.

Sources of Potential Pollutants: Pollutant generating sources at facilities in these categories include fueling, loading & unloading, material storage and handling (especially fertilizers), and vehicle and equipment cleaning and maintenance. Potential pollutants include TSS, BOD, COD, Oil and Grease, heavy metals and fertilizer components including nitrates, nitrites, ammonia nitrogen, Kjeldahl Nitrogen, and phosphorous compounds.

OTHER TRANSPORTATION AND COMMUNICATION - SIC: 4700-4900

Description: This group includes travel agencies, communication services such as TV and radio stations, cable companies, and electric and gas services. It does not include commercial railroads, airplane transport services, airlines, pipeline companies, and airfields. None of these SIC codes are categorically included in the industrial stormwater general permit. However, SIC 4785, National Guard, have been covered where their industrial activities are similar to other covered activities (e.g. transportation facilities with vehicle maintenance).

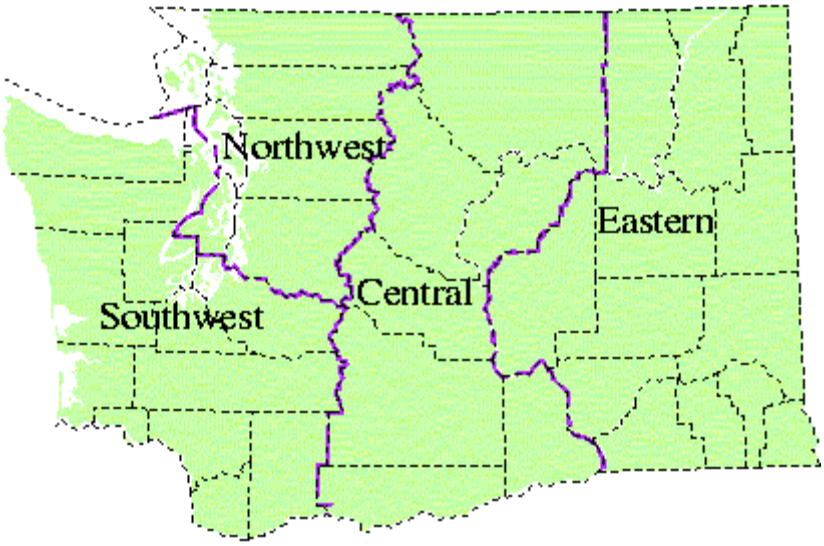
Existing Coverages: As of November 28, 2001, Ecology had issued coverage to 8 facilities in this category.

Sources of Potential Pollutants: Gas and electric services are likely to own vehicles that are washed, fueled and maintained on site. Communication service companies can generate used oils and Dangerous Wastes. The following are the potential pollutants: Oil and grease, TSS, BOD, and heavy metals.

PERMIT STATUS AND SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The previous stormwater discharge permit for industrial activities became effective on November 18, 2000 and is virtually identical to the 1995-2000 permit. The permit requires new Permittees to develop and implement a stormwater pollution prevention plan (SWPPP) before beginning operation. All Permittees are required to update their SWPPP as necessary and follow the practices and procedures identified in the SWPPP. Permittees are not required to submit the SWPPP to Ecology unless they receive a specific request to do so. Permittees are required to manage stormwater through best management practices (BMPs). BMPs must be sufficient to assure that the discharge of stormwater does not violate water quality standards. Facilities that are out of compliance are expected to adopt BMPs to achieve compliance. The permit does require visual monitoring of stormwater discharges and the BMPs to assure that stormwater management is successful. It does not require the Permittee to report their visual monitoring to Ecology. It does not require Permittees to conduct stormwater sampling and analysis.

Because this is a general permit, permit status and compliance refers to how well individual facilities with permit coverage are performing. Ecology issues permit coverage to a facility though the headquarters' office in Lacey. Once issued, however, Ecology's regional offices have the responsibility to manage permit coverage for facilities located within their region. The regional offices respond to complaints about facilities and requests by facilities for technical assistance. They conduct inspections to determine permit compliance and require corrective measures as necessary. The regional offices are responsible for taking enforcement actions for noncompliance. Regional priorities and staffing considerations determine the level of response that can be applied to managing the permitted facilities within their region. As of December 26, 2001, Ecology's Northwest Regional Office had 628 Permittees with coverage under the industrial stormwater general permit, the Southwest Regional Office had 514 Permittees, the Central Regional Office had 62 Permittees, and the Eastern Regional Office had 59 Permittees.



Site visits are a very important part of assuring compliance with permit requirements. Ecology's regional offices are able to inspect between 15% to 30% of the industrial facilities each year. Facilities that are failing to comply often require multiple site visits. Facility inspections have revealed that many facilities with permit coverage are not in compliance with permit provisions.

The stormwater pollution prevention plan (SWPPP) is a critical permit requirement, identifying how stormwater at a facility will be managed to prevent stormwater pollution. However, it is estimated that as recently as August 2001, only about half of the facilities with permit coverage could locate their SWPPP during an Ecology inspection. Even fewer had a SWPPP that was kept up-to-date and fully implemented. Best management practices (BMPs) are required by the permit to prevent stormwater pollution. Based on site inspections, about 60% to 70% of the facilities could identify one or more BMPs that were maintained to manage stormwater, but no more than 25% would be considered in full compliance with permit BMP requirements. It is estimated that at least 10% to 15% of the permitted facilities have a stormwater discharge that is likely to be causing a measurable environmental problem.

WASTEWATER CHARACTERIZATION

Stormwater may become contaminated by industrial activities as a result of contact with materials stored outside, spills and leaks from equipment or materials used onsite, contact with materials during loading, unloading or transfer from one location to another, and from airborne contaminants. Stormwater contaminated by contact with raw materials or products (products includes all products, intermediate products, by-products and waste products) during the manufacturing process is considered process water. The discharge of process water is not authorized under this permit and must be covered separately. Many of the potential pollutants in stormwater discharges are industry specific but there are also significant commonalties between the various industrial activities. Motorized equipment, cars, trucks, and heavy equipment are typically used at industrial sites. They represent a source of contamination by petroleum products that is common to most facilities with coverage under this permit. Industrial activities are typically associated with impervious surfaces and the collection of dirt and other debris that stormwater may mobilize. This can result in high levels of suspended solids and turbidity in the stormwater discharge. Metals are also common contaminates at industrial sites either from motorized equipment or raw materials and products.

SEPA COMPLIANCE

New facilities must demonstrate compliance with the State Environmental Policy Act, SEPA (Chapter 43.21C RCW), before permit coverage can be authorized. Permit modification also requires SEPA compliance and additional SEPA review may be necessary if the modification falls outside of the scope of the initial SEPA evaluation of industrial siting and activities.

Any existing facility planning a significant process change must submit a new application for coverage to modify their permit and demonstrate that the proposed change has complied with SEPA review. A significant process change for industries covered under this permit can result from a change in the nature of pollutants in the discharge or an increase in the volume of discharge. Any change in facility activities or procedures that would alter the types or concentration of pollutants in the stormwater discharge such as by adding a new industrial activity (SIC) that was not previously covered would require modification of permit coverage. Any change that would add additional impervious surface or acreage increasing stormwater discharge by 25% or more would require modification of permit coverage. Facilities must apply for modification of coverage and demonstrate compliance with SEPA before implementing any significant process change.

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in an NPDES permit must be either technology-based or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants or to prevent/minimize the introduction of pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The numeric limits in this permit apply to a specific set of technology-based requirements and water quality-base requirements. The Environmental Protection Agency (EPA) developed technology-based requirements for specific industrial activities. Technology-based numeric limits on stormwater discharge are included for those industries subject to the EPA developed limits. The permit includes water quality-based requirements for industrial activities that discharge to waters listed according to Section 303(d) of the Clean Water Act and as necessary to be consistent with a TMDL determination. No other numeric limits for specific criteria are included. The permit does require stormwater discharges to comply with water quality standards and implement all known, available, and reasonable treatment (AKART) in the form of best management practices for their industrial activity.

TECHNOLOGY-BASED LIMITATIONS

The permit includes a narrative requirement to implement all best management practices (BMPs) for stormwater management that are typically applicable to a facility. This is a technology-based requirement and must be implemented regardless of potential impact of stormwater discharges on the receiving waterbody. The applicable BMPs are defined by the stormwater management manual. The *Stormwater Management Manual for the Puget Sound Basin* is the applicable manual for facilities that implemented BMPs prior to the updated manual. New facilities in western Washington are now required to use the *Stormwater Management Manual for Western Washington*. New facilities in eastern Washington are required to use the *Stormwater Management Manual for Eastern Washington* when it is completed. These requirements are discussed further under the "Stormwater Pollution Prevention Plan" section of the fact sheet.

In addition facilities that have a coal pile, hazardous waste landfills subject to the provisions of 40 CFR Part 445 Subpart A, and non-hazardous waste landfills subject to the provisions of 40 CFR Part 445 Subpart B must comply with the applicable EPA technology-based limits. These limits are:

Coal Piles

	EFFLUENT LIMITATIONS FOR **COAL PILES**	
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
pH	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
Total Suspended Solids (TSS)	NA	50 mg/L

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. If only one sample is taken during the calendar month, the average monthly effluent limitation applies to that sample. If only one sample is taken during the monitoring quarter, the average monthly effluent limitation applies to that sample.

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day.

Hazardous Landfills

	EFFLUENT LIMITATIONS FOR HAZARDOUS WASTE LANDFILLS	
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
pH	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
BOD5	56 mg/L	220 mg/L
TSS	27 mg/L	88 mg/L
Ammonia	4.9 mg/L	10 mg/L
Alpha Terpineol	0.019 mg/L	0.042 mg/L
Aniline	0.015 mg/L	0.024 mg/L
Benzoic Acid	0.073 mg/L	0.119 mg/L
Naphthalene	0.022 mg/L	0.059 mg/L
p-Cresol	0.015 mg/L	0.024 mg/L
Phenol	0.029 mg/L	0.048 mg/L
Pyridine	0.025 mg/L	0.072 mg/L
Arsenic (total)	0.54 mg/L	1.1 mg/L
Chromium (total)	0.46 mg/L	1.1 mg/L
Zinc	0.296 mg/L	0.535 mg/L

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. If only one sample is taken during the calendar month, the average monthly effluent limitation applies to that sample. If only one sample is taken during the monitoring quarter, the average monthly effluent limitation applies to that sample.

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day.

Non-hazardous Landfills

	EFFLUENT LIMITATIONS FOR NON-HAZARDOUS WASTE LANDFILLS	
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
pH	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
BOD5	37 mg/L	140 mg/L
TSS	27 mg/L	88 mg/L
Ammonia	4.9 mg/L	10 mg/L
Alpha Terpineol	0.016 mg/L	0.033 mg/L
Benzoic Acid	0.071 mg/L	0.12 mg/L
p-Cresol	0.014 mg/L	0.12 mg/L
Phenol	0.015 mg/L	0.026 mg/L
Zinc (total)	0.11 mg/L	0.20 mg/L
[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. If only one sample is taken during the calendar month, the average monthly effluent limitation applies to that sample. If only one sample is taken during the monitoring quarter, the average monthly effluent limitation applies to that sample.		
[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day.		

SURFACE WATER QUALITY LIMITATIONS

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in a receiving water while remaining protective of aquatic life. Numerical criteria set forth in the Water Quality Standards are used along with chemical and physical data for the wastewater (stormwater) and receiving water to determine if a discharge is complying with water quality standards.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters. Because most human health-based criteria are based on lifetime exposures, direct comparisons with transient stormwater concentrations may often be inappropriate. This and the high variation in stormwater pollutant concentrations, both between storms and during a single storm make the application of human health criteria to stormwater particularly problematic. Ecology has therefore placed permit emphasis on implementing best management practices (BMPs) to limit contamination of stormwater. Source control BMPs are expected to eliminate/minimize the potential contamination of stormwater and to protect human health. However, if stormwater monitoring for representative parameters raises questions about the success of the BMP approach, Ecology will have to evaluate how human health criteria could be numerically applied to stormwater discharges.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the State of Washington. Best management practices are required in the permit to eliminate/minimize the contamination of stormwater and protect beneficial uses of waters of the state.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

Antidegradation by definition applies to site-specific conditions. A general permit includes many sites statewide. It is impractical to discuss antidegradation for each site with coverage under the industrial stormwater general permit. However, the permit does require the discharge to comply with water quality standards. Complying with standards will typically afford the protection necessary to prevent ongoing degradation of a waterbody from stormwater discharges. Further assurance of antidegradation compliance is provided by on-site investigations. Ecology prioritizes site visits to most effectively use resources. Complaints about stormwater discharges from a site will receive a high priority for investigation. Discharges to waters known to be impaired as a result of stormwater discharges have a high priority. Results from the stormwater monitoring required by the proposed permit will also be used to prioritize site visits.

CRITICAL CONDITIONS

Surface water quality-based limits are derived for the waterbody's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic waterbody uses. The factors include the flow and background level of toxic substances in the receiving water and the flow and concentration of toxic substances in the discharge. The inherent variability of storm events and stormwater discharges add complexity to defining critical conditions. Storm events are naturally occurring and affect the characteristics of both the stormwater discharge and the receiving waterbody. They vary in intensity and duration; can be isolated events or part of storm event pattern. All these factors affect flows and water quality.

Acute conditions are changes in the physical, chemical, or biologic environment which are expected or demonstrated to result in injury or death to an organism as a result of short-term exposure to the substance or detrimental environmental condition. The acute standards for metals are one-hour concentrations not to be exceeded more than once every three years. The most likely critical stormwater conditions for acute toxicity would be a high intensity short duration storm event that occurs after a long period of no rain. This results in low flows in the receiving water and a high potential for pollutants that stormwater can mobilize. The critical condition for acute toxicity is most likely to occur during a summertime storm event.

Chronic conditions are changes in the physical, chemical, or biological environment which are expected or demonstrated to result in injury or death to an organism as a result of repeated or constant exposure over an extended period of time to a substance or detrimental environmental condition. The chronic standards for metals are four-day averages not to be exceeded more than once every three years. Since chronic exposure is over several days, the “first flush” effect that occurs after a dry period is not as likely to be significant. Chronic exposure also requires storm events that result in stormwater discharge over a four-day period. However, the critical condition is still most likely to occur after the summer drought when waterbody flows are low. Much of the stormwater that falls in a drainage basin at the beginning of the wet season will be absorbed reducing the impact on flow in the receiving waterbody. During the same time the stormwater discharge off a developed site is likely to be in direct proportion to the storm event.

MIXING ZONES

The Water Quality Standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving all known, available, and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

When authorized, mixing zones define the point of compliance of water quality-based criteria in the receiving waterbody. The potential mixing zone is defined in the Washington Administrative Code (WAC) in terms of linear dimensions and volume of the receiving water. The actual mixing zone is defined in relation to the point of discharge and how the discharge mixes with the

receiving water. Only the discharge plume can be considered as part of the actual mixing zone. In order to determine actual compliance with water quality-based criteria in the receiving water, one would have to sample within the discharge plume at the edge of the allotted mixing zone. Without a visual marker in the discharge such as a dye (discharge turbidity could be a marker), it is virtually impossible to sample the receiving water for compliance with precision. Typically a mixing zone dye study or modeling is applied to establish the amount of mixing a discharge will receive in the allotted mixing zone. This mixing is expressed as a dilution factor. For specific pollutants, the background level of the pollutant in the receiving water also factors into determining the available dilution. These factors become part of a calculation used to set a discharge limit that must be met at the point of discharge (or as close to point of discharge as practical). All of these considerations are very site-specific and difficult for stormwater discharges. Since a general permit must apply to a number of different sites, precise mixing zones and available dilution are not easily applied to facilities covered under a general permit.

This general permit does authorize the application of a mixing zone to determine if a Permittee's discharge complies with water quality-based standards. To be eligible the Permittee must have applied all appropriate best management practices for stormwater management at their site and allowable mixing must not result in loss of beneficial uses in the receiving water. A discharge that is not causing or contributing to a water quality violation will typically not cause a loss of beneficial uses. New facilities must request a mixing zone by completing that portion of the application for coverage. The existing and previous versions of the permit authorized a mixing zone when considering compliance with water quality-based criteria. Although the revised permit is more specific on the dimensions of the mixing zone and how it will be applied, it is not introducing a new authorization to existing Permittees. Therefore, existing Permittees will be eligible for a standard mixing zone without submitting an application for modification of coverage.

A mixing zone will not be allowed for pollutants of concern in waters listed in Washington State pursuant to Section 303(d) of the Clean Water Act for either new or existing permit coverage. These waters have been listed because of measurements in the waterbody that exceed water quality-based standards. Where background in the receiving water is at or above water quality standards at the point of discharge, there is no available dilution and therefore a mixing zone is not applicable. Waters subject to a total maximum daily load determination (TMDL) also have requirements that may preclude a mixing zone. The discharge of stormwater to these waters must be consistent with the TMDL determination.

WAC 173-201A-100 requires that the permit establish the allowable size of the mixing zone. In order to provide this specificity within the context of a general permit, the permit has set the default or standard mixing zone size:

a. Streams and rivers: The mixing zone shall extend in the direction of the current from the point of discharge until there is complete mixing but not to exceed 300 feet.
b. Lakes: The mixing zone shall extend in any horizontal direction from the point of discharge 200 feet.
c. Estuaries: The mixing zone shall extend in any horizontal direction from the point of discharge 200 feet.

d. Oceanic: The mixing zone shall extend in any horizontal direction from the point of discharge 300 feet.
e. Other: The mixing zone for any surface waterbody that is not covered above will be determined by Ecology.

For stormwater discharges, WAC 173-201A-100(10) allows exceedences of the typical numeric size criteria for mixing zones. The general permit will accommodate this option through a procedure that requires the Permittee to request an expanded mixing zone. New facilities and existing facilities may request an expanded mixing zone through the application for coverage/modification by completing the portion that applies to the expanded mixing zone (see Appendix E). They must complete the Public Notice requirements as outlined in the permit. Ecology will consider the information on the request form and any public comments to determine if an expanded mixing zone will be authorized.

Description of the Receiving Water

This general permit applies to facilities across the state. There are many different receiving waters. Stormwater may be discharged to a municipal separate stormwater sewer system, a stormwater conveyance system such as a roadside ditch, or directly to a creek, lake, pond or other surface waterbody. Typically the discharge will either directly or indirectly enter waters classified as Class AA or Class A with beneficial uses that include water supply, fish/shellfish, wildlife habitat, and recreation. In highly urbanized areas the discharge will likely enter a collection system and commingle with other sources of stormwater before discharging to a receiving water. In these urbanized locations the receiving water is likely to be more than a small creek in size but also likely to be subject to a significant number of municipal and industrial stormwater discharges. In a more suburban setting the receiving water is not as likely to be subject to multiple municipal and industrial stormwater discharges but is more likely to be a small creek or intermittent stream. In both cases, the potential impact of stormwater is significant.

Surface Water Quality Criteria

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA 1992). The standard criteria that apply to Class A waters are listed below:

Fecal Coliforms	Fresh water - 100 organisms/100 mL maximum geometric mean Marine water - 14 organisms/100 mL maximum geometric mean
Dissolved Oxygen	Fresh water - 8 mg/L minimum Marine water - 6 mg/L minimum
Temperature	Fresh water - 18 degrees Celsius due to human activities Marine water - 16 degrees Celsius due to human activities
pH	Fresh water – 6.5 to 8.5 standard units Marine water -7.0 to 8.5 standard units

Turbidity	Less than 5 NTU above background when background is 50 NTU or less, or have no more that a 10% increase if background exceeds 50 NTU
Toxics	No toxics in toxic amounts

CONSIDERATION OF SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

Water quality-based limits for numeric criteria for all Permittees are not included in the proposed permit. A permit does not typically set limits and require monitoring for all criteria. Instead there is typically a review of wastewater data to determine the parameters of concern and, either through direct sampling or comparison to data of similar facilities, set limits and monitoring for discharge of pollutants that have a reasonable potential to violate water quality standards. Determining reasonable potential includes a statistical determination of the maximum concentration of the pollutant likely to occur in the discharge, factoring in available dilution, and accounting for receiving water background levels for the pollutant. Some criteria are dependent on additional site-specific conditions, for example, hardness of the discharge/receiving water is necessary to calculate the criteria for many metals. These site-specific considerations are not easily applied to a general permit. Ecology has therefore placed permit emphasis on implementing best management practices (BMPs) to limit contamination of stormwater. Source control BMPs and treatment BMPs as necessary are expected to prevent water quality violations. Therefore the permit does not set water quality-based effluent limits for all permittees. The permit does apply limits as appropriate for discharges to impaired waters. If stormwater monitoring for representative parameters raises questions about the success of the BMP approach, Ecology will evaluate how water quality-based numeric criteria could be applied in the next permit cycle.

Although the proposed permit does not include specific water quality-based numeric limits for all discharges, it does include a narrative requirement to comply with water quality standards. If site-specific analysis reveals that stormwater discharges are violating water quality standards, enforcement action may be taken. Ecology expects the typical enforcement action will be an Order with a compliance schedule to achieve standards. Ecology may also require the Permittee to obtain an individual permit if this general permit is not adequate to address the water quality violation. The permit does require new facilities that propose to discharge to waters listed under Section 303(d) of the Clean Water Act, to meet water quality criteria for the parameters of concern before discharge to impaired waters. This requirement will be expressed as an effluent limit issued during authorization of coverage. Any facility that discharges to waters subject to a TMDL determination must be consistent with the TMDL determination. If the TMDL limits pollutant load or concentration for stormwater discharges, these limits will be included in permit coverage.

BENCHMARKS

The permit is proposing benchmark values. Benchmark values are not water quality criteria or effluent limits but they are intended to identify discharges that are at low risk of violating water quality standards. Discharges that do not exceed the benchmark values are not likely to violate water quality standards. Discharges that do exceed one or more benchmark values represent a higher risk of violating water quality standards. Site-specific conditions must still be considered

to determine if an actual water quality violation exists. The following parameters and values are included in the proposed permit.

Parameter	Benchmark Value	Basis
pH	In the range of 6 to 9 standard units	USEPA MSGP
Turbidity	25 NTU	Ecology Field Observation
Copper	63.6 µg/L	USEPA MSGP
Lead	81.6 µg/L	USEPA MSGP
Zinc	117 µg/L	USEPA MSGP
Oil and Grease	15 mg/L	USEPA MSGP
Ammonia	19 mg/L	USEPA MSGP
BOD5	30 mg/L	USEPA MSGP
Phosphorus (total)	0.5 mg/L	USEPA MSGP

USEPA MSGP is the multi-sector general permit for industrial activities issued by the Environmental Protection Agency, October 20, 2000.

WHOLE EFFLUENT TOXICITY

Whole effluent toxicity (WET) testing of stormwater discharges covered under a general permit is not appropriate at this time. 40 CFR 122.44(d), RCW 90.48.520, and Chapter 173-205 WAC all have as their goal the eventual elimination of the discharge to surface water of toxics in toxic amounts. The steps contained in these requirements for making progress toward this goal are technology-based controls, chemical-specific effluent limits, and then WET testing with limits and toxicity identification evaluations if needed. These are the same regulatory steps in the same order as they were generally applied in industrial process wastewater discharge permits resulting in large improvements in effluent and receiving water quality over the years. Mixing zones and associated determinations of available dilution are key elements in this process because they are necessary in order to be able to determine what is a "toxic amount." As discussed previously, determining the available dilution in a mixing zone is problematic for stormwater discharges. It is an even greater challenge within the context of a general permit. Available dilution determinations for each facility with coverage are not available at this time for Permittees under the industrial stormwater general permit.

40 CFR 122.44(d) is the federal regulation which requires limits in NPDES permits in order to protect water quality from the discharge of effluent toxicity. 40 CFR 122.44(d)(1)(v) requires that an NPDES permit must contain effluent limits for whole effluent toxicity when the permitting authority has determined, using the procedures in 40 CFR 122.44(d)(1)(ii), that the discharge has a reasonable potential to exceed the state's narrative water quality criteria for toxicity. 40 CFR 122.44(d)(1)(v) continues by saying that limits on whole effluent toxicity are not necessary if the permitting authority has demonstrated that chemical-specific limits, determined using the same procedures in 40 CFR 122.44(d)(1)(ii) as for WET limits, are sufficient to maintain state water quality standards. 40 CFR 122.44(d) gives more priority to chemical-specific limits than WET by allowing chemical-specific limits instead of WET limits

when they are sufficiently protective while containing no provision for the reverse (WET instead of chemical-specific). This is an acknowledgement that chemical-specific limits and monitoring are a more direct and efficient method for achieving the goal of controlling toxicants in wastewater even though WET testing is sometimes also necessary. Also of importance in discussing stormwater WET testing is that the procedures in 40 CFR 122.44(d)(1)(ii) allow the permitting authority to account, where appropriate, for dilution of the effluent in the receiving water in assigning either a chemical-specific or a WET limit.

RCW 90.48.520 is the state law that mandates NPDES permit limits in order to improve water quality by controlling effluent toxicity. RCW 90.48.520 begins by instructing the Department of Ecology to incorporate conditions in all state and federal discharge permits which require all known, available, and reasonable methods to control toxicants in wastewater. In the general permit these conditions take the form of stormwater management plans and best management practices (BMPs) which are designed to control the discharge of stormwater toxicity along with other forms of pollution. RCW 90.48.520 then continues by stating that these conditions may include, but are not limited to: (1) Limits on the discharge of specific chemicals, and (2) limits on the overall toxicity of the effluent. Chemical-specific limits are listed first and, even though the ordering might or might not reflect the actual legislative priority, it only makes sense to control the known toxicants first before requiring WET testing. WET testing and toxicity identification evaluations are a waste of resources for stormwater until more basic chemical specific monitoring has been completed. WET testing should be delayed until after baseline data on basic parameters have been collected.

Chapter 173-205 WAC contains the specific instructions for the Department of Ecology to use in writing NPDES permits in order to implement WET testing and limits. WET testing requirements begin with an effluent characterization to establish a baseline toxicity level and determine the need for WET limits. If the discharge cannot meet a WET limit, then WAC 173-205-090 and the permit will require a toxicity identification/reduction evaluation (TI/RE) in order to come into compliance with the WET limit. An effluent characterization, compliance monitoring, and TI/RE for WET will be expensive and take time to complete. If the TI/RE finds that a toxicant responsible for the toxicity in an effluent already has water quality criteria for aquatic life protection and could have been controlled sooner at less expense by BMPs or a chemical-specific approach, then there will have been a needless waste of resources. In order to allow time for implementation of the more direct approaches for toxicant control to occur first and in order to avoid characterizing a discharge which will change and possibly need to be recharacterized, WAC 173-205-030(4) allows the Department of Ecology to delay characterization. WET characterization will not be included in this permit. The permit will instead begin a process to examine chemical specific toxicity. Ecology will evaluate the results of this testing to determine if WET testing will be included in the next permit cycle.

SEDIMENT QUALITY

The Department has promulgated aquatic sediment standards (Chapter 173-204 WAC) to protect aquatic biota and human health. These standards state that the Department may require Permittees to evaluate the potential for the discharge to cause a violation of applicable standards (WAC 173-204-400). The permit requires best management practices (BMPs) to limit contamination of stormwater. Source control BMPs are expected to eliminate/minimize the potential contamination of stormwater and comply with aquatic sediment standards. However, if

stormwater monitoring for representative parameters raises questions about the success of the BMP approach, Ecology will consider additional permit requirements in the future to assure compliance with sediment standards.

GROUND WATER QUALITY LIMITATIONS

The Department has promulgated Ground Water Quality Standards (Chapter 173-200 WAC) to protect beneficial uses of ground water. Permits issued by the Department shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100). The permit requires best management practices (BMPs) to limit contamination of stormwater. Source control BMPs are expected to eliminate/minimize the potential contamination of stormwater and to protect ground water. However, if stormwater monitoring for representative parameters raises questions about the success of the BMP approach, Ecology will consider additional permit requirements and possible limits to protect ground water.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved. Ecology is proposing limited sampling and analysis as well as visual monitoring for this permit. Monitoring results of stormwater sampling will be reported. This sampling and reporting requirement is the cornerstone of Ecology's intention to provide tangible evidence of Permittees' performance and the overall effectiveness of this permit.

The permit proposes quarterly monitoring. This monitoring frequency reflects a consideration of the certainty, risk, and cost associated with monitoring stormwater and the objectives of the permit. Certainty has to do with how much monitoring is required to achieve a level of confidence that the data are representative of the pollutants in the discharge. The risk is an assessment of the environmental impacts from pollutants and how well the data will represent any environmental concern in discharges from a site. Cost considers all associated monitoring expenses: time to sample, expense of shipping and analysis, training and equipment requirements. The objectives define what the sampling is to accomplish.

The proposed permit includes monitoring to provide tangible evidence of how well the permit requirements control pollutants in stormwater both at a specific site and statewide. The intent is to provide an overview of the potential to pollute at individual industrial sites and a baseline of data for considering where we are and what may require changing in the next permit reissue. These objectives suggest that all Permittees should conduct monitoring but only for a minimal set of parameters to limit cost. There is a known risk to the environment from pollutants in stormwater. It is much harder to know when a specific discharge is causing a problem and to define a precise threshold. The minimum set of parameters required in the permit should be adequate under most conditions to identify sites that are most likely to pose a risk to the environment. Providing a reasonable level of certainty for achieving the objectives for the monitoring is difficult for stormwater. Stormwater quality varies both between storm events and during a storm event, limiting the ability to extrapolate data from one storm to another or provide statistically representative data for all types and combinations of storms. Ecology contracted with Woodward-Clyde Consultants to prepare a Stormwater Quality Monitoring Guidance Manual

(November 1995). In the chapter entitled "Monitoring to Assess Compliance with Surface Water Quality Criteria" they recommended monitoring three to five storms per season to provide reasonably representative monitoring. Quarterly monitoring achieves the recommended frequency and combined with guidance on when and how to monitor should be sufficient to achieve monitoring objectives. A minimum of two years of monitoring was considered necessary to reduce the risk of results being skewed by an unusually wet or dry years. Eight data points are also a minimal number for attaining some statistical significance.

Permittees will receive a guidance document from Ecology on when and how to sample stormwater to meet the conditions of the permit. The guidance and the proposed permit incorporate the EPA recommended guidelines for when to monitor stormwater discharges. Ecology did change the antecedent 72-hours of no precipitation guidance provided by EPA. Weather patterns in western Washington are significantly different from much of the United States and 72-hours is overly restrictive and would likely make sampling a qualifying storm event overly burdensome for Permittees. Sampling guidance will still recommend a longer period of no precipitation but only 24 hours will be required. The guidelines establish the appropriate storm event as:

- 0.1 inches of precipitation
- at least 24-hours of no precipitation prior to storm event

The sample should be taken within the first 30 minutes after the stormwater discharge begins. If that is not possible, EPA guidance allows sampling within the first hour. The proposed permit requires sampling within the first hour but Permittees will be instructed to sample within the first 30 minutes if possible. The Permittee should plan to get a valid sample as soon as possible each quarter. If the Permittee is unable to sample according to all listed criteria, they may sample and submit results along with an explanation of what criteria were not followed and why. The explanation does not constitute compliance with sampling criteria but will be considered by Ecology in determining if any enforcement action is warranted. Failure to sample during a quarter where appropriate rainfall events occurred is a permit violation.

Based on their site analysis and the Ecology guidance document, permittees will determine where and how they will sample stormwater discharge from their site, including a determination of representative sampling. Representative sampling does not require that all discharge points be sampled. Multiple sampling points are only required where the exposure to pollutants will be significantly different and result in the presence of different pollutants. The Permittee may limit sampling and analysis to the discharge most likely to have the highest concentration of pollutants as long as this will not misrepresent the presence of different pollutants in discharges and will not underestimate the pollutant loading from the site. The proposed permit requires the Permittee to document this in their monitoring plan which is included in their stormwater pollution prevention plan.

Quarterly monitoring will begin with the first quarter of 2003. There are two significant reasons for delaying the beginning of monitoring for about 6 months after the effective date of the permit. The first is that Ecology will require time to modify the Water Quality Permit Life Cycle System database and set up electronic submission. It is important that all systems are in place before data is collected. The second is that this is a new initiative and it will take time for Permittees to prepare. Ecology also intends to do informational workshops to help Permittees

implement stormwater monitoring. Data are only valuable if they are of useful quality. Taking time to implement monitoring and increase the probability of good data is much more valuable than rushing to collect data immediately after the permit becomes effective.

The proposed permit recognizes that some Permittees may pose virtually no probability of environmental risk. However, Ecology does not have the data to categorically rule out any Permittees at this time. Therefore all Permittees will be required to conduct base level monitoring except for an allowance as noted in the following paragraph. Some Permittees will do additional monitoring based on the potential risk from industry specific pollutants. Benchmark values have been set for the base level and additional pollutants. Permittees that achieve eight consecutive quarters at or below benchmark values for all the identified pollutants may suspend monitoring for the remainder of the permit term. Consecutive means all quarters in which a discharge was sampled. Any quarter where there was no discharge will not be counted. Ecology will also authorize suspension of monitoring for a 303(d) listed parameter of concern if eight consecutive samples fail to detect the presence of the listed parameter. Benchmark values and suspension of monitoring for consistent attainment does not apply to monitoring for permit limits. Facilities that are subject to permit limits; landfills, coal piles, impaired waters; must conduct quarterly monitoring for the parameters subject to permit limits throughout the duration of this permit. Monitoring frequency for permit limits will be reevaluated at the next permit reissue based on the data collected.

There are facilities that qualify for and receive an extreme hardship fee reduction under the Wastewater Discharge Permit Fee Rule (Chapter 173-224 WAC). Extreme hardship can only apply if the annual gross revenue of goods and services produced using the processes regulated under the permit is one hundred thousand dollars or less and the fee poses an extreme hardship to the business. Permit managers may reduce or waive the monitoring requirement for these facilities. The proposed permit requires an additional demonstration that the facility does not represent a significant environmental risk. As of January 15, 2002 there were 10 facilities that might qualify for this exception to the monitoring requirements.

BASE LEVEL MONITORING REQUIREMENTS

The proposed permit is not attempting to address all the possible pollutants from each industrial facility. Instead, a basic set of parameters were selected to provide a strong indication of how well a facility is doing. The representative parameters are pH, turbidity, zinc, and oil & grease. Collectively these parameters should indicate how well a facility is doing at preventing stormwater contamination at a minimal level of laboratory expense. The permit proposes that all facilities must conduct this base level monitoring with the possible exception of "extreme hardship" noted above. Ecology expects to conduct independent testing using an expanded set of parameters to determine how well the representative approach is working. Ecology will evaluate the monitoring requirements at the next reissue of this permit. The data will be used to better target monitoring requirements and could result in increasing or decreasing monitoring, adding or subtracting parameters, and adding or removing monitoring requirements for industrial groups.

pH is included in the base level monitoring requirements to determine how acidic/alkaline the discharge is. Extremes in pH are toxic to fish and unsuitable for ground water used as a drinking water source. Rainfall is slightly acidic as it hits the ground but buffers quickly achieving near

neutral pH. Significantly high or low pH in the stormwater discharge is a strong indication that the stormwater has been contaminated. If the stormwater discharge is strongly acidic, 5 or lower, or strongly alkaline, 10 or above, the Permittee should immediately begin looking for a source of contamination. If the pH of the stormwater discharge is in the range of 6 to 9 standards units, it is not likely to cause a water quality violation. Unless the discharge is subject to a pH limit (S3.C. or S3.D.), the Permittee is authorized to use litmus paper for measuring pH.

Turbidity of water is related to the amount of suspended and colloidal matter contained in the water. Increasing turbidity reduces the clarity and penetration of light, negatively impacting aquatic organisms. Suspended solids can settle out, covering up gravel beds and suffocating or driving off benthic organisms. Fish may be harmed by suspended particles which can irritate the gills. In addition many of the pollutants that are found in stormwater are attached to the small particles that become suspended in the stormwater increasing their potential toxicity. Turbidity is an indirect measure of total suspended solids and therefore high turbidity is a strong indicator of stormwater contamination. Total suspended solids and settable solids are tests that were also considered as an indicator. Turbidity was chosen for base level monitoring in part because Chapter 173-201A WAC includes a turbidity standard. This provides a more direct basis for determining compliance with water quality standards. Turbidity can also be conducted onsite if the Permittee purchases a turbidity meter. Based on field experience, Ecology staff determined that a stormwater discharge of 25 NTU or less will typically cause no water quality violation.

Zinc can be toxic to aquatic organisms and is a common constituent of contaminated stormwater. There are a number of metals that may be found in stormwater discharges but a review of data supplied by the State of Connecticut showed that zinc was more commonly associated with stormwater than copper and lead. Where either copper or lead tended to be significant in the stormwater, zinc would also be found at significant levels. Therefore, total zinc was chosen as the representative metal for base level monitoring. In their Multi Sector General Permit (MSGP), the Environmental Protection Agency established a benchmark value for zinc (total) of 117 µg/L. Zinc concentrations at or below that value will not typically cause a water quality violation.

Oil and grease has been selected as a base level monitoring requirement. It includes thousands of organic compounds with varying physical and chemical properties. Oil and grease exhibit an oxygen demand. Oil may adhere to fish gills or coat and destroy algae or other plankton. Oil will also taint the flesh of fish and shellfish. Although the oil and grease test does not include all the hydrocarbons that may result from petroleum contamination of stormwater, it will test for the common contaminants. It is a more economical test than some of the other hydrocarbon tests and combined with the permit requirement to visually identify any oil sheen in stormwater discharge, should reveal any problem with petroleum contamination. The Environmental Protection Agency MSGP benchmark value for oil and grease is 15 mg/L.

ADDITIONAL MONITORING REQUIREMENTS

The proposed permit also includes additional monitoring for specific industrial groups or where zinc levels exceed the benchmark value in two consecutive samples. Additional monitoring for these groups was considered appropriate because of high risk to the environment or significant probability of contaminates that the base level parameters would not reveal.

Exceeding Zinc Benchmark: Copper and lead pose a significant environmental risk. There was a strong correlation of one or both of these parameters to high levels of zinc in the data from

Connecticut. Therefore the proposed permit requires any Permittee that exceeds the benchmark value for total zinc in two consecutive quarters to begin monitoring for total copper and total lead as well as total zinc in all succeeding monitoring. The EPA benchmark values are: copper (total), 63.6 µg/L and lead (total), 81.6 µg/L.

Timber Product Industry and Paper and Allied Products: These industrial activities often have piles of bark, wood, wood debris, wood chips, and sawdust that are exposed to stormwater. This exposure is very likely to add organic material to the stormwater that can result in the depletion of oxygen in the receiving water. This represents a significant environmental risk and one not addressed by the base level parameters. Therefore the proposed permit includes monitoring for biochemical oxygen demand (BOD5). The EPA benchmark for BOD5 is 30 mg/L. Facilities with eight consecutive quarters of monitoring at or below the benchmark value can suspend monitoring for BOD5 for the remainder of the permit cycle.

Air Transportation: This industrial activity will typically use deicing/anti-icing chemicals on runways and aircraft during the winter months. These chemicals can be toxic to aquatic organisms, contaminate ground water and cause a depletion of oxygen in the receiving water. This is a serious environmental concern and the base level parameters are not adequate to indicate if a problem may exist. Because the application of these chemicals are confined to freezing conditions, sampling will only be required during the months of December, January, and February. During this period the Permittee is to take four (4) samples from separate discharge events. All samples will be analyzed for biochemical oxygen demand (BOD5). Samples will also be analyzed for ammonia and for nitrogen as nitrate/nitrite if urea is applied. The EPA benchmark for BOD5 is 30 mg/L, for ammonia it is 19 mg/L, and for nitrogen as nitrate/nitrite it is 0.68 mg/L.

Chemical and Allied Products and Food and Kindred Products: These industrial activities are at risk of contaminating stormwater with nutritive and organic chemicals. Phosphorus and nitrogen contamination can artificially stimulate plant growth resulting in decaying matter that depletes oxygen in the water causing toxic conditions. Organic chemicals can also cause a depletion of oxygen. The base level parameters will not predict the potential environmental risk from these chemicals. Therefore this group of industrial activities is required to conduct additional stormwater analysis for nitrogen from nitrates and nitrites, total phosphorus, and biochemical oxygen demand (BOD5). The EPA benchmark values for these chemicals are: nitrate/nitrite nitrogen, 0.68 mg/L; total phosphorus, 2.0 mg/L; and BOD5, 30 mg/L.

Primary Metals, Metals Mining, Automobile Salvage, Scrap Recycling, and Metals Fabricating: These industrial activities have a high risk of stormwater contamination by metals. Because metals toxicity is a significant environmental risk, monitoring for these industries will include copper, lead, and hardness in addition to the base level monitoring. Hardness is included because it influences the toxic effect of the metals. Since there is no "correct" hardness, there is no benchmark value for hardness and it is not considered in determining if a facility may suspend monitoring based on consistent attainment of benchmark values. The EPA benchmark values are: total copper, 63.6 µg/L and total lead, 81.6 µg/L.

MONITORING FOR LIMITS

Hazardous and Non-hazardous Landfills: The Environmental Protection Agency (EPA) has recently adopted technology-based requirements that are applicable to landfills. The effluent

development document applies to hazardous waste sites subject to the provisions of 40 CFR Part 445 Subpart A and to non-hazardous waste landfills subject to the provisions of 40 CFR Part 445 Subpart B. Hazardous waste facilities include industrial activities that treat, store or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA. Non-hazardous waste facilities are those landfills or land application sites that receive or have received industrial waste, including sites subject to regulation under Subtitle D of RCRA. There are exceptions listed under 40 CFR 445.1 that may apply. Landfill operations with coverage under the general permit should review the exceptions, particularly any facility where the landfill is operated by and limited to wastes generated by the permitted facility. The permit sets the monitoring requirement at quarterly for these facilities. Because effluent limits have been set under EPA effluent guidelines, there is no option to suspend monitoring. However, in the next permit cycle, Ecology could alter the frequency based on a review of the data reported under the proposed permit.

Coal Piles: The EPA has generated effluent guidelines for discharges from coal piles in 40 CFR Part 423. These requirements were developed for the steam electric industrial category but are applied to any industrial activity that maintains a coal storage pile. The permit sets the monitoring requirement at quarterly for these facilities. There is no option to suspend monitoring but based on data, Ecology could alter the frequency in the next permit cycle. To comply with this permit provision, the sample must be taken before the stormwater runoff commingles with stormwater from any other source. Permit limits are for the coal pile runoff and do not allow for dilution by other sources of stormwater.

Impaired Waters: The proposed permit sets limits for discharges to impaired waters. Because there are many listings under Section 303(d), the permit does not include the specific limits for each listing. Total maximum daily load determinations (TMDLs) or Water Cleanup Plans may require permit limits to demonstrate compliance with the TMDL. These will be handled on a case-by-case basis. Limits for impaired waters will appear in a permit cover sheet issued at the time coverage is authorized for new permit coverage. Facilities currently under permit coverage will receive a permit cover sheet with limits before monitoring begins. This delay is necessary to collect data necessary to identify which existing facilities discharge to impaired waters. New facilities are expected to comply with the permit limits immediately. Existing permitted discharges that exceed the limit will be considered by Ecology to be under a compliance schedule to achieve compliance with the limit. The Permittee must make a good faith effort at improving their best management practices to reduce the pollutant of concern. The process begins with identifying potential sources of the pollutant and structural and nonstructural BMPs to reduce the pollutant in stormwater. Each following year the Permittee must implement BMPs beginning with nonstructural source control BMPs and progressing to treatment BMPs if necessary to achieve compliance with water quality standards. Each step must be documented annually in a report included in the stormwater pollution prevention plan. The report must include the steps that were taken and the results achieved. The permit provides this adaptive management approach until such time as a TMDL is completed defining waste load allocations.

Ecology has determined that stormwater discharges are not a contributor to exceedences of temperature. Since high temperatures in the receiving water are a summer phenomenon and storm events are very limited during this period, there is very little potential for stormwater to contribute to the high temperature impairment. Storm events that do happen during the summer are more likely to reduce ambient temperature than to raise it. Therefore, the permit does not

require temperature monitoring for stormwater discharges to temperature impaired waterbodies. Monitoring for fecal coliform will not be required of all stormwater discharges to waters impaired for this pollutant. Permittees that document that there is no source of fecal coliform from their industrial activities will not be required to monitor for it. This documentation must include all potential industrial sources including the presence of animals as part of the industrial activity (e.g. guard dogs). All other listed parameters will require monitoring. However, the Permittee may suspend monitoring for a listed parameter if eight consecutive analyses fail to detect the presence of the parameter.

LAB ACCREDITATION

With the exception of certain parameters the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories.* Turbidity and pH are parameters that the Permittee may monitor and report without lab accreditation.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

S5. – Reporting and Recordkeeping Requirements: The reporting and recordkeeping requirements of Special Conditions S5. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210). Discharge monitoring reports must be submitted to Ecology every quarter even if there was no discharge or if monitoring was suspended based on consistent attainment of benchmark values. This will assure that Ecology records are maintained and demonstrate compliance with monitoring requirements by the facility.

"NO EXPOSURE" CERTIFICATE

S6. - "No Exposure" Certificate: Any facility that qualifies may submit a request for "no exposure" exemption from permit coverage (see Appendix G). "No exposure" means that all industrial activities are conducted under cover so that there is no reasonable probability that pollutants from industrial activities will come in contact with stormwater. Pollution from air vents will typically not preclude qualification as long as the amounts are insignificant and in compliance with air quality regulations. Stormwater off roofs will typically be acceptable unless the roof composition itself is likely to contribute pollutants to stormwater in significant quantities.

There are potentially many facilities that are classified as light industry (see Appendix C) that do not have coverage under the current permit but do discharge stormwater to surface water. There are just over 400 facilities currently permitted with standard industrial codes (SIC) under light industry but almost 17,000 facilities in the state that qualify as light industry based on SIC. Many are likely to discharge to surface water or a stormwater system that discharges to surface water. Ecology does not have the resources to field inspect all the facilities that may apply for the "no exposure" certificate. Therefore applicants will automatically be granted the "no exposure" exemption 60 days after submitting the form to Ecology unless Ecology responds in writing, denying or delaying the "no exposure" status. Ecology will deny applications that do not meet

the minimum requirements based on responses on the application form. Ecology will post a listing of facilities receiving "no exposure" exemption on an Ecology web page for public review. The "no exposure" certificate conveys to Ecology the right to enter and inspect the facility and facilities must reapply every five years.

COMPLIANCE WITH WATER QUALITY STANDARDS

S7.- Compliance With Standards: The proposed permit requires compliance with water quality standards. All facilities with permit coverage are expected to have best management practices to manage stormwater so that their stormwater discharge will not cause or contribute to a violation of water quality standards in waters of the state. Ecology recognizes the difficulty stormwater presents to easily determine when a discharge is causing a water quality violation. Ecology also recognizes the challenges associated with designing stormwater management for storm events that vary in duration, intensity, and volume. A general permit is also limited in the extent it can address considerations that are very site-specific. The issue focuses on providing reasonable assurance of environmental protection within the context of what is reasonably achievable. The proposed permit has included the following provisions to address this issue:

- all known available and reasonable treatment (AKART)
- monitoring and analysis
- mixing zones
- zero dilution for 303(d) listed waters
- stormwater management manual (SWMM) minimum technical requirements for treatment

Permittees are required to implement all the best management practices (BMPs) as identified in Special Condition S9, Stormwater Pollution Prevention Plan. Operational and structural source control BMPs must be in place, operational, and maintained. Treatment BMPs are also required for industrial activities that unavoidably lead to significant stormwater contamination. The stormwater management manual (SWMM) identified BMPs necessary to limit the exposure of stormwater to pollutants and in some cases to apply treatment. Implementation of these BMPs is presumed to typically result in discharges of stormwater that will not violate water quality standards. If the prescribed BMPs fail to be protective, the Permittee is required to add additional BMPs to achieve compliance. Monitoring and analysis was included to provide an indication of when water quality violations may a concern and additional BMPs required. Final consideration of a water quality violation will consider available dilution except for parameters of concern in waters listed according to Section 303(d) of the Clean Water Act. Application of these provisions are expected to provide protection of waters of the state that is reasonably achievable.

The *Stormwater Management Manual for Western Washington* (SWMM) is the current standard for minimum technical requirements addressing water quality of stormwater through treatment BMPs for facilities in western Washington. The previous manual, *Stormwater Management Manual for the Puget Sound Basin*, applies to facilities that implemented BMPs prior to the availability of the updated manual. These facilities are not required to update their BMPs to the new standard unless they are not meeting water quality standards or they are redeveloping their facility. Under the SWMM for western Washington, the design basis for volume-based treatment systems is the 6 month, 24 hour storm event. For flow rate-based treatment systems, the design basis is the flow rate at, or below which, 91% of the runoff volume, as estimated by an approved

continuous runoff model, will be effectively treated. This design storm was derived to assure that stormwater treatment facilities were sized to treat 91% of the stormwater. The design storm for eastern Washington has not been determined yet but it will be defined in the *Stormwater Management Manual for Eastern Washington* when it is completed. Although the storm event may be different than the 6 month 24-hour event defined for western Washington, it will meet the same type of standard, 91% of stormwater treated, as western Washington. Treatment systems must be fully functional for all storm events that do not exceed the design storm. Treatments systems that fail to fully treat stormwater during storms that exceed the water quality design storm are not in violation of the permit provisions. Failure of source control BMPs will be considered a violation of permit provisions even when the storm exceeds the water quality design storm.

OPERATION AND MAINTENANCE

S8. - Operation and Maintenance: The Permittee must properly operate and maintain all best management practices for stormwater management. However, Ecology recognizes that circumstances can develop that require bypassing the stormwater management systems. Special Condition S8 includes bypass procedures, identifying when it may be authorized and the Permittee's responsibility to inform Ecology.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

S9. - Stormwater Pollution Prevention Plan (SWPPP) for Industrial Facilities: The Stormwater Pollution Prevention Plan, is the very heart of permit requirements under the industrial stormwater general permit. The SWPPP is the **plan** for and the **action** of managing stormwater to comply with the state's requirement under chapter 90.48 RCW to protect the beneficial uses of waters of the state. The permit identifies a few situations such as existing facilities coming under permit for the first time, where time is allowed to fully develop and implement the SWPPP. But for those facilities currently under permit coverage and for all new facilities, the permit requires a fully developed and implemented SWPPP. The SWPPP must be retained on-site or within reasonable access to the site and available for review by Ecology. The SWPPP must identify potential sources of stormwater contamination from industrial activities and how those sources of contamination are managed to prevent or minimize contamination of stormwater. If contamination of stormwater is unavoidable, the SWPPP will quantify the environmental risk and determine if treatment of the stormwater is necessary to prevent a violation of water quality standards and loss of beneficial uses in waters of the state. The SWPPP must be a "living" document that is under consistent review and revised as necessary to assure that stormwater discharges are not resulting in degradation of the states waters. Pollution prevention is not a one time effort but requires constant vigilance and full participation if it is to be effective. Like maintaining safety at the site, the SWPPP will only be successful when it becomes part of the way all employees at the site do business.

Best management practices (BMPs) are the action items identified in the SWPPP to manage and treat stormwater. BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices used to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage. In the proposed permit, BMPs are categorized

as operational source control, structural source control, and treatment BMPs. All facilities are required to implement operational and source control BMPs. Treatment BMPs are required when operational and source control BMPs are not sufficient to assure compliance with water quality standards.

Ecology released the *Stormwater Management Manual for Western Washington* (SWMM) in September 2001. The *Stormwater Management Manual for Eastern Washington* is still under development. Until the eastern Washington manual is completed, facilities in eastern Washington should use the western Washington manual where applicable or other applicable stormwater management practices specific to eastern Washington. All references to SWMM requirements for facilities in eastern Washington are intended to mean the Eastern Washington Manual when it becomes available. The SWMM was recently revised and many facilities already under permit based their BMPs on the previous version. The proposed permit does not require current Permittees to redo their SWPPP and implement all changes found in the revised SWMM. Although the revisions may be applicable to existing facilities, new and revised BMPs in the updated SWMM were evaluated within the context of new and redevelopment projects. Wholesale updating to the new manual may provide little gain for significant expense. Therefore, current Permittees are only required to apply BMPs from the new manual if their stormwater discharge is failing to achieve compliance with water quality standards or where redevelopment at the site fits the manual definition. For existing facilities, applying "the applicable technical standards and BMPs" in the permit language means those standards and BMPs that are necessary to achieve compliance with water quality standards and does not necessarily mean all BMPs at the facility.

Local government may adopt stormwater management manual equivalent to Ecology's manual. Permittees may use equivalent manuals and BMPs. However, a Permittee must be able to demonstrate equivalency when substituting BMPs for those listed in Ecology's stormwater manual. When the applicable and recommended BMPs in the manual are not adequate to address water quality concerns, the Permittee may implement innovative BMPs that achieve compliance with the proposed permit. The SWPPP must identify the BMPs that are required for a facility, where they are implemented, how they will maintained, who is responsible for maintenance, and the maintenance schedule.

Operational Source Control BMPs include a schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the pollution of waters of the state. These activities do not require construction of pollution control devices but are very important to a successful SWPPP. Employee training, for instance, is critical to achieving timely and consistent spill response. Pollution prevention is likely to fail if the employees do not understand the importance and objectives of best management practices. Prohibitions might include eliminating field repair work on equipment and certainly would include the elimination of intentional draining of crankcase oil on the ground. Good housekeeping and maintenance schedules help prevent incidents that could result in the release of pollutants. Operational BMPs represent a very cost-effective way to control pollutants and protect the environment. The SWPPP must identify all the operational BMPs and how they are implemented. For example, it will not be sufficient to simply say that employees will be trained. The SWPPP must identify what that training will consist of, when that training will take place, and who is responsible to assure that employee training happens. Chapter 2 of volume 4 in the *Stormwater Management Manual for Western Washington*

provides a detailed list of operational source control measures that apply to virtually all industrial activities. The chapter provides the required best management practices for each major category listed in the permit. It includes "recommended additional… BMPs" for good housekeeping, preventative maintenance, and spill prevention and cleanup. The recommended BMPs are not required but may be necessary to achieve discharge compliance with water quality standards.

Structural Source Control BMPs include physical, structural, or mechanical devices or facilities intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities (e.g. cleaning out sediment traps), construction of roofs over storage and working areas, and direction of equipment wash water and similar discharges to the sanitary sewer or a dead end sump. Structural source control BMPs are likely to include a capital investment but are cost effective compared to cleaning up pollutants after they have entered stormwater. Structural source control BMPs are also identified in chapter 2 of volume 4 in the *Stormwater Management Manual for Western Washington*. Some of the control measures are specific to an industrial group such as "Commercial Composting" while others apply to general industrial activities such as "Mobil Fueling of Vehicles and Heavy Equipment".

The previous BMPs are designed to prevent pollutants from entering stormwater to begin with. However, even with a very aggressive and successful program, stormwater may still require treatment to achieve discharge compliance with water quality standards. Treatment BMPs are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands[2]. Volume 5 of the *Stormwater Management Manual for Western Washington* provides information on treatment BMPs including guidance on selecting appropriate treatment BMPs. All facilities are encouraged to review chapter 5 of the SWMM and implement appropriate treatment BMPs. Facilities that are unable to achieve discharge compliance through source control BMPs are required to implement appropriate treatment BMPs. If treatment BMPs are not required, the facility must still include in their SWPPP a description of how they arrived at that conclusion.

Ecology recognizes the need to include specific BMP requirements for stormwater runoff quantity control to protect beneficial water uses, including fish habitat. New facilities and existing facilities undergoing redevelopment are required to implement the requirements for peak runoff rate and volume control identified by volume 1 of the SWMM as applicable to their development. Chapter 3 of volume 3 lists BMPs to accomplish rate and volume control. Existing facilities should also review the requirements of volumes 1 (Minimum Technical Requirements) and chapter 3 of volume 3. Although not required to implement these BMPs, controlling rate and volume of stormwater discharge is very important to the health of the watershed. Existing facilities should identify control measures that they can implement over time to reduce the impact of uncontrolled release of stormwater.

[2]Developing a constructed wetland can be an effective way to treat stormwater. However, wetlands constructed for treatment of stormwater are not eligible for use as compensatory mitigation for authorized impacts to regulated wetland systems.

SOLID WASTE PLAN

S10. - Solid and Liquid Waste Disposal: RCW 90.48.080 requires appropriate disposal of any organic or inorganic waste. This includes any wastes that are collected as a result of stormwater treatment. Maintenance of stormwater treatment facilities must include appropriate disposal of collected wastes. They must not be allowed to resuspended and discharged. The plan for appropriate collection and disposal of solid waste must be included in the stormwater pollution prevention plan.

NOTICE OF TERMINATION

S11. - Notice of Termination (NOT): The Permittee of record is responsible for complying with the terms and conditions of the permit unless it is transferred to a new Permittee or permit coverage is terminated. A Permittee may terminate coverage by submitting the official Ecology form for termination of coverage.

PRIMARY ACTIVITY DESGINATION

S12. - Determination of Primary Activity: The appropriate Standard Industrial Code (SIC) is the one that best describes the industrial activity at the site that is under coverage. For example, if a landfill is owned by a pulp and paper mill, the appropriate SIC is 4953 for the landfill activity, not 2611 for the pulp mill parent company. Since permit conditions can be different for different industrial activities, it is important to make sure that Ecology has the right designation. It is ultimately the Permittee's responsibility to make sure their activity is properly designated and that they have coverage for activities that fall under the industrial stormwater general permit.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations and have been standardized for all individual industrial NPDES permits issued by the Department.

Condition G1 requires the Permittee to comply with the terms and conditions of the proposed permit. Condition G2 requires the Permittee to properly operate and maintain all pollution control facilities and systems. Condition G3 requires the Permittee to control its production in order to maintain compliance with its permit. Condition G4 requires the Permittee to allow Ecology to access the treatment system, production facility, and records related to the proposed permit. Condition G5 specifies conditions that may result in revoking the general permi. Condition G6 specifies conditions for modifying, suspending or terminating the permit. Condition G7 requires the permittee to notify Ecology when facility changes may require modification or revocation of permit coverage. Condition G8 requires the Permittee to comply with more stringent toxic effluent standards or prohibitions established under Section 307(a) of the Clean Water Act. Condition G9 incorporates by reference all other requirements of 40 CFR 122.41 and 122.42. Condition G10 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Condition G11 notifies the Permittee that additional monitoring requirements may be established by Ecology. Condition G12 requires the payment of permit fees. Condition G13 prohibits the reintroduction of removed substances back into the effluent. Condition G14 allows the Permittee to request their general permit coverage be replaced by an individual permit. Conditions G15 and G16 relate to permit renewal and transfer. Condition G17 describes the penalties for violating permit conditions. Condition G18 requires

responsible officials or their designated representatives to sign submittals to Ecology. Condition G19 defines appeal options for the terms and conditions of the general permit and of coverage under the proposed permit by an individual discharger. Condition 20 invokes severability of permit provisions.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. The Department proposes that this proposed permit be issued for five (5) years.

SMALL BUSINESS ECONOMIC IMPACT STATEMENT (SBEIS)

Ecology prepared a small business economic impact analysis for the revised permit. The proposed general permit for stormwater discharges associated with industrial activities will have a disproportionate impact on small business. However, there is little mitigation that that can be effected without violating requirements of state or federal water pollution control laws. Furthermore, in all the cases analyzed here, compliance costs are no higher than 0.5% of sales, and they only reach as high as that in a scenario with a combination of conservative assumptions. There are, nonetheless, two elements of mitigation in the permit, one available to all entities, the other to a subset of small businesses. The first is the suspension of sampling requirements for those firms that demonstrate "consistent attainment" as discussed above in the section on "Permit Requirements." The second is an "Extreme Hardship" waiver.

A copy of the SBEIS may be obtained through the Publications Distribution at the Ecology Lacey office (360) 407-6000 or by download from Ecology's webpage (http://www.ecy.wa.gov/pubs/0210011.pdf.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA)

2000. NPDES Storm Water Multi-Sector General Permit. Federal Register, V. 65, No. 210, Monday, October 30, 2000.

1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.

1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.

1988. Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling. USEPA Office of Water, Washington, D.C.

1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.

1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.

Tsivoglou, E.C., and J.R. Wallace.

1972. Characterization of Stream Reaeration Capacity. EPA-R3-72-012. (Cited in EPA 1985 op.cit.)

Washington State Department of Ecology.

2001. Stormwater Management Manual for Western Washington. Publication Numbers 99-11 through 99-15.

1994. Permit Writer's Manual. Publication Number 92-109

Wright, R.M., and A.J. McDonnell.

1979. In-stream Deoxygenation Rate Prediction. Journal Environmental Engineering Division, ASCE. 105(EE2). (Cited in EPA 1985 op.cit.)

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

Public Workshops/ Public Hearings/Public Comment:

Ecology has tentatively determined to reissue the industrial stormwater general permit to industrial activities as identified in the permit, Special Condition S2. Permit Coverage. The proposed permit will revoke and replace the current permit.

Ecology will publish a Public Notice of Draft (PNOD) by April 3, 2002 in the State Register, the Spokesman Review (March 29, 2002), the Seattle Daily Journal of Commerce (March 29, 2002), the Daily Olympian (March 29, 2002), the Bellingham Herald (March 29, 2002), the Vancouver Columbian (April 1, 2002), the Aberdeen Daily World (March 30, 2002), and the Yakima Herald Republic (April 1, 2002) to inform the public that the draft permit and fact sheet are available for review. The notice will also be mailed to those who currently have coverage under the industrial stormwater general permit and those identified as interested parties. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at Ecology's regional offices listed below. They may also be downloaded from the Internet: http://www.ecy.wa.gov/programs/wq/stormwater/ Written comments should be mailed to:

Keith Johnson
Water Quality Program
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Ecology will also conduct a workshop and public hearing at the following six locations in the state:

May 6, 2002	May 7, 2002
Bates Technical College Auditorium – Downtown Campus 1101 S. Yakima Avenue Tacoma, Washington	Department of Social and Health Services The Skagit and Snohomish Rooms 900 E. College Way Mount Vernon, Washington
May 9, 2002	May 10, 2002
Spokane County Cooperative Extension Meeting Room B N. 222 Havana Spokane, Washington	Washington State Dept of Ecology Central Regional Office 15 West Yakima Avenue, Suite 200 Yakima, Washington
May 13, 2002	May 14, 2002
Washington State Dept of Ecology Northwest Regional Office 3190 - 160th Avenue SE Bellevue, Washington	Department of Social and Health Services DCS Conference Room 5411 East Mill Plain – Town Plaza Mall Vancouver Washington

Any interested party may comment on the draft permit or testify at a public hearing on this draft permit. Written comments must be received by Ecology no later than 5:00 p.m., Friday, May 17, 2002 at the Ecology headquarters' building in Lacey, Washington. Public notice regarding the hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

Ecology will consider all oral testimony provided at the public hearings and all written comments received by May 17, 2002. Ecology's response to all significant comments will be available upon request and mailed directly to people expressing an interest in this permit.

This permit and fact sheet are available at Ecology's regional offices:

Southwest Regional Office
Water Quality Program
300 Desmond Drive
Lacey, Washington
Phone: (360) 407-6279

Central Regional Office
Water Quality Program
15 West Yakima Avenue, Suite 200
Yakima, Washington
Phone: (509) 457-7148

Northwest Regional Office
Water Quality Program
3190 - 160th Avenue SE
Bellevue, Washington
Phone: (425) 649-7201

Eastern Regional Office
Water Quality Program
N. 4601 Monroe, Suite 202
Spokane, Washington
Phone: (509) 456-6310

Further information may be obtained by contacting Keith Johnson at Ecology, by phone at (360) 407-6442, by email at kjoh461@ecy.wa.gov, or by writing to the address listed above.

This permit and fact sheet were written by Keith Johnson.

APPENDIX B--GLOSSARY

303(d) Listed Waters – see Waters Listed as Impaired – 303(d).

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART-- An acronym for "all known, available, and reasonable methods of treatment".

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation --The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Responsible Corporate Officer-- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

Waters Listed as Impaired, 303(d)--Listed waters refers to the specific segment of a waterbody listed by the State as required under Section 303(d) of the Clean Water Act. The most current list of impaired waters is the applicable list.

APPENDIX C—INDUSTRIAL CATEGORIES

The following categories of facilities are considered to be engaging in industrial activity subject to stormwater as listed in 40 CFR Subpart 122.26(b)(14), as of July 1, 2000, Code of Federal Regulations.

1. FACILITIES SUBJECT TO STORMWATER EFFLUENT LIMITATIONS GUIDELINES, or NEW SOURCE PERFORMANCE STANDARDS specified in 40 CFR Subchapter N, or TOXIC POLLUTANT EFFLUENT STANDARDS under 40 CFR Subchapter D (except facilities with toxic pollutant effluent standards which are exempted under category 11 below).

2. FACILITIES LISTED UNDER THE FOLLOWING STANDARD INDUSTRIAL CLASSIFICATIONS (SIC):

   -24 Lumber and Wood Products (except 2434 - Wood Kitchen Cabinets, see Category 11)
   -26 Paper and Allied Products (except 265 - Paperboard Containers; and 267 - Converted Paper and Paperboard Products, see Category 11)
   -28 Chemicals and Allied Products (except 283 - Drugs; and 285 Paints, Varnishes, Lacquers, Enamels, and Allied Products, see Category 11)
   -29 Petroleum and Coal Products, (except 2951 - Asphalt Concrete Plants, must apply for the sand and gravel general permit)
   -311 Leather Tanning and Finishing
   -32 Stone, Clay and Glass Products (except 323 - Glass Products made from purchased glass, see category 11) and (except 3273 - Ready-Mixed Concrete, must apply for the sand and gravel general permit)
   -33 Primary Metals Industries
   -3441 Fabricated Structural Metal
   -373 Ship and Boat Building and Repairing

3. FACILITIES CLASSIFIED AS SICs 10 THROUGH 14 (mineral industry) listed below, including active or inactive mining operations [except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) Subchapter N (Coal Mining Point Source Category: BPT, BAT, BCT Limitations and New Source Performance Standards) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas on noncoal mining operations which have been released from applicable state or federal reclamation requirements after December 17, 1990] and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come in contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations. Inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator. Inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites

where minimal activities are undertaken for the sole purpose of maintaining a mining claim.

-10 Metal Mining
-12 Coal Mining
-13 Oil and Gas Extraction
-14 Mining and Quarrying of Nonmetallic Minerals, except Fuels (except 1411 - dimension stone; 1422 - Crushed and Broken Limestone; 1423 - Crushed and Broken Granite; 1429 - Crushed and Broken Stone, Not Elsewhere Classified; 1442 - Construction Sand and Gravel; 1446 - Industrial Sand, 1445 - Kaolin and Ball Clay; 1459 - Clay, Ceramic, and Refractory Minerals, Not Otherwise Classified; 1499 - Miscellaneous Nonmetallic Minerals, Except Fuels; must apply for the sand and gravel general permit)

4. HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES, including those operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

5. LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS that receive or have received any industrial wastes (waste that is received from any of the facilities described in this appendix) including those subject to regulation under Subtitle D of RCRA.

6. RECYCLING FACILITIES, facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093.

7. STEAM ELECTRIC POWER GENERATING FACILITIES, including coal handling sites.

8. TRANSPORTATION FACILITIES classified under SICs below, which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations, airport deicing operations or which are otherwise identified under one of the other 11 categories of industrial activities listed in this appendix are associated with industrial activity.

-40 Railroad Transportation,
-41 Local and Interurban Passenger Transportation,
-42 Motor Freight Transportation and Warehousing (except 4221 - Farm Product Warehousing and Storage; 4222 Refrigerated Warehousing and Storage; and 4225 - General Warehousing and Storage; see Category 11),
-43 United States Postal Service,
-44 Water Transportation,
-45 Transportation by Air,
-5171 Petroleum Bulk Stations and Terminals;

9. TREATMENT WORKS treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge, that are located within the confines of the facility, with a design flow of one million gallons per day or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the CWA.

10. CONSTRUCTION ACTIVITIES are not covered under the industrial stormwater general permit.

11. FACILITIES UNDER THE FOLLOWING STANDARD INDUSTRIAL CLASSIFICATIONS:

-20 Food and Kindred Products
-21 Tobacco Products
-22 Textile Mill Products
-23 Apparel and Other Textile Products
-2434 Wood Kitchen Cabinets
-25 Furniture and Fixtures
-265 Paperboard Containers and Boxes
-267 Converted Paper and Paperboard Products
-27 Printing, Publishing and Allied Industries
-283 Drugs
-285 Paints, Varnishes, Lacquers, Enamels, and Allied Products
-30 Rubber and Miscellaneous Plastic Products
-31 Leather and Leather Products (except 311 - Leather Tanning and Finishing, see Category 2)
-323 Glass Products Made of Purchased Glass
-34 Fabricated Metal Products (except 3441 - Fabricated Structural Metal, see Category 2)
-35 Industrial and Commercial Machinery and Computer Equipment
-36 Electronic and Other Electrical Equipment
-37 Transportation Equipment (except 373 - Ship and Boat Building and Repair, see Category 2)
-38 Measuring, Analyzing, and Controlling Instruments, Photographic, Medical and Optical Goods; Watches and Clocks
-39 Miscellaneous Manufacturing Industries
-4221 Farm Product Warehousing and Storage
-4222 Refrigerated Warehousing and Storage
-4225 General Warehousing and Storage.

APPENDIX D—PERMITTEES LISTED BY SIC CODE

PERMITTEE NAME	SIC	PERMIT #	COUNTY
PACIFIC TOPSOILS MALTBY	0782	SO3004516A	KING
PEND OREILLE MINE	1031	SO3001204C	PEND OREILLE
KETTLE RIVER JOINT VENTURE	1041	SO3001184C	FERRY
HECLA MINING COMPANY REPUBLIC	1041	SO3001539C	FERRY
PCCC INDUSTRIAL YARD	1221	SO3001189C	KING
COLUMBIA RIVER CARBONATES	1422	SO3003107B	COWLITZ
PACIFIC TOPSOILS BOTHELL	1499	SO3002077C	SNOHOMISH
CROWN PACIFIC HAMILTON	1611	SO3002438C	SKAGIT
GLACIER NORTHWEST INC	1629	SO3002227C	KING
APPLIED FINISHING INC	1721	SO3002106C	SNOHOMISH
ALLIED STEEL FABRICATORS INC	1791	SO3002652B	KING
PHILIP SERVICES NORTHWEST	1799	SO3004404A	COWLITZ
IBP INC	2011	SO3001131C	WALLA WALLA
OBERTO SAUSAGE CO KENT PLANT	2013	SO3000803C	KING
OBERTO SAUSAGE CO AIRPORT WAY PLANT	2013	SO3000804C	KING
DRAPER VALLEY FARMS	2015	SO3000552C	SKAGIT
DRAPER VALLEY FARMS RENTON	2015	SO3003893B	KING
FOSTER FARMS KELSO	2015	SO3003208B	COWLITZ
WESTFARM FOODS SUNNYSIDE	2021	SO3000567C	YAKIMA
ARCTIC ICE CREAM NOVELTIES	2024	SO3000088C	KING
WESTFARM FOODS	2026	SO3000564C	WHATCOM
DARIGOLD RAINIER AVE PLANT	2026	SO3000500C	KING
DARIGOLD ISSAQUAH PLANT	2026	SO3000497C	KING
OCEAN SPRAY MARKHAM FACILITY	2033	SO3000507C	GRAYS HARBOR
NORTHWEST PACKING CO	2033	SO3001129C	CLARK
SAFEWAY INC GRANDVIEW JUICE PLANT	2033	SO3000736C	YAKIMA
VALLEY PROCESSING INC	2033	SO3001127C	YAKIMA
SENECA FOODS CORP	2033	SO3000565C	COLUMBIA
DEL MONTE FOODS 125	2033	SO3000215C	YAKIMA
TREE TOP INC WENATCHEE	2034	SO3000384C	CHELAN
AGRILINK FOODS INC NALLEYS FINE FD	2035	SO3000480C	KING
FARMAN BROS PICKLE CO	2035	SO3000502C	KING
LAMB WESTON QUINCY	2037	SO3000583C	GRANT
TWIN CITY FOODS INC STANWOOD	2037	SO3004021B	SNOHOMISH
TWIN CITY FOODS INC PROS	2037	SO3000382C	BENTON
WOODRING ORCHARDS LTD	2037	SO3001561C	CHELAN
JOHNSON CONCENTRATES	2037	SO3002734B	YAKIMA
J R SIMPLOT CO FOOD DIV	2037	SO3001220C	GRANT
TWIN CITY FOODS INC ELL	2037	SO3000383C	KITTITAS
HI COUNTRY	2037	SO3003094B	YAKIMA
MILNE FRUIT PRODUCTS	2037	SO3000186C	BENTON
CENTENNIAL MILLS DIV ADM MILLING	2041	SO3000313C	SPOKANE
PENDLETON FLOUR MILLS LLC	2041	SO3001817C	KING
CONTINENTAL MILLS	2045	SO3001761C	KING

BAKERY CHEF SEATTLE	2045	SO3002171C	KING
CARGILL INC	2048	SO3000666C	SKAGIT
LAND O LAKES FARMLAND FEED LLC	2048	SO3000207C	WHATCOM
GLOBAL HARVEST FOOD	2048	SO3002219C	KING
ELENBAAS CO INC	2048	SO3000862C	WHATCOM
LAND O'LAKES FARMLAND FEED LLC CHE	2048	SO3000208C	LEWIS
PM AG PRODUCTS	2048	SO3004526A	KING
HI Q BAKERY INC	2051	SO3003515B	KING
PLUSH PIPPIN FOODS CORPORATION	2053	SO3001984C	KING
CONAGRA MALT AMERICAS	2083	SO3000310C	CLARK
COLUMBIA BEVERAGE COMPANY	2086	SO3004082B	THURSTON
NORTHSTAR BEVERAGES CO LLC	2086	SO3000638C	KING
SHASTA BEVERAGES INC	2086	SO3001080C	KING
PEPSI BOTTLING	2086	SO3000873C	YAKIMA
COCA COLA BOTTLING CO OF WASHINGTON	2086	SO3000872C	KING
COLUMBIA BEVERAGE CO	2086	SO3003921B	THURSTON
TREE TOP INC CASHMERE	2086	SO3000385C	CHELAN
TREE TOP INC SELAH	2086	SO3000566C	YAKIMA
MAYCO FISH COMPANY LTD	2091	SO3001748C	PIERCE
EAST POINT SEAFOODS SOUTH BEND	2091	SO3000501C	PACIFIC
UNISEA FOODS INC	2091	SO3000172C	KING
TRIDENT SEAFOODS CORP ANAC	2092	SO3000880C	SKAGIT
OCEAN BEAUTY SEAFOODS AKA WA FISH	2092	SO3000881C	KING
BORNSTEIN SEAFOODS INC	2092	SO3000679C	WHATCOM
BOUNDARY FISH CO	2092	SO3001010C	WHATCOM
TRIDENT SEAFOODS CORP FIFE	2092	SO3001680C	PIERCE
HANNEGAN PROPERTIES LLC	2092	SO3001210C	WHATCOM
EAST POINT SEAFOODS NAHCOTTA	2092	SO3000757C	PACIFIC
SHINING OCEAN	2092	SO3002914B	KING
COAST SEAFOODS CO	2092	SO3002920B	PACIFIC
WIEGARDT BROS INC JOLLY ROGER	2092	SO3004341A	PACIFIC
FLETCHERS FINE FOODS INC ALGONA	2092	SO3002034C	KING
ARROWAC FISHERIES INC	2092	SO3001136C	WHATCOM
COMMERCIAL COLD STORAGE	2092	SO3000101C	SKAGIT
TIM'S CASCADE	2096	SO3004482A	KING
STAR ICE AND FUEL	2097	SO3001712C	PIERCE
WEST COAST GROCERY SUPER VALU	2099	SO3001693C	PIERCE
GREEN GARDEN FOOD PRODUCTS INC	2099	SO3002150C	KING
SALMOLUX INC FEDERAL WAY	2099	SO3002293C	KING
STOCKPOT INC	2099	SO3004064B	KING
FRANZ SEATTLE	2099	SO3002292C	KING
PROFICIENT FOOD COMPANY	2099	SO3001997C	KING
SUNSHINE BAKING CO	2099	SO3002200C	KING
DIANES FOODS	2099	SO3003704B	PIERCE
CALPINE CORP GOLDENDALE ENERGY PROJ	2211	SO3004405A	KLICKITAT
BBA NONWOVENS WASHOUGAL INC	2297	SO3000503C	CLARK
BONDED FIBERS NORTHWEST INC	2297	SO3001972C	LEWIS
NET SYSTEMS INC	2399	SO3002478C	KITSAP

B AND D INC	2411	SO3004018B	CLALLAM
DUNLAP TOW OLYMPIA LOG YD/CHIP RELD	2411	SO3000106C	THURSTON
WESTERN WOOD LUMBER CO QUENDALL LOG	2411	SO3000108C	KING
SV PULLIN BRADY LOG YARD SHELTON	2411	SO3003791B	MASON
DUNLAP TOWING CO E WATERWAY LOGYARD	2411	SO3001597C	SNOHOMISH
PAPAC LOGGING	2411	SO3001927C	GRAYS HARBOR
VAAGEN BROS LUMBER INC COLVILLE	2411	SO3002389C	STEVENS
GREEN CROW AIRPORT LOG YARD	2411	SO3000201C	CLALLAM
RAYONIER GRAYS HARBOR DOCK	2411	SO3000132C	GRAYS HARBOR
LONGVIEW FIBRE LEAVENWORTH	2411	SO3000205C	CHELAN
GREEN CROW CORP P+D LOG YARD	2411	SO3000107C	SNOHOMISH
FRED TEBB AND SONS INC	2411	SO3001641C	PIERCE
CAFFALL BROS WEYERHAEUSER YARD FAC	2411	SO3001862C	COWLITZ
EDMAN CO TACOMA OPERATION	2411	SO3003019B	PIERCE
WINLOCK VENEER CO	2411	SO3004250A	LEWIS
CATHLAMET LOG SORT YARD	2411	SO3000133C	WAHKIAKUM
DUNLAP TOWING S TERM LOG YARD EVER	2411	SO3000109C	SNOHOMISH
PORT OF GRAYS HARBOR	2411	SO3000875C	GRAYS HARBOR
CITIFOR INC	2411	SO3000126C	THURSTON
LONGVIEW BOOMING CO INC	2411	SO3000866C	COWLITZ
MANKE LUMBER SHELTON LOG DUMP	2411	SO3000473C	MASON
CARLSON LOG TRANSSHIPMENT FACILITY	2411	SO3004379A	SAN JUAN
MURRAY PACIFIC THORNE ROAD YARD	2411	SO3004246A	PIERCE
DUNLAP TOWING CHIP RELOAD MARYSVILL	2411	SO3000569C	SNOHOMISH
PACIFIC LUMBER AND SHIPPING CO	2411	SO3002918B	COWLITZ
S V PULLIN PT GAMBLE	2411	SO3000508C	KITSAP
PT OF PORT ANGELES MARINE TERM LOG	2411	SO3000191C	CLALLAM
MILLER SHINGLE CO YARD 3	2411	SO3000203C	SNOHOMISH
RYAN RESOURCES	2411	SO3004485A	PIERCE
WEYERHAEUSER CO HARBOR PORT	2411	SO3002762B	GRAYS HARBOR
SIMPSON DOOR CO	2411	SO3000790C	GRAYS HARBOR
JACKSON TIMBER LOG YARD	2411	SO3003421B	GRAYS HARBOR
WEYERHAEUSER SMITH ISLAND	2411	SO3001823C	SNOHOMISH
WEYERHAEUSER VAIL CAMP	2411	SO3001126C	THURSTON
PORT OF GRAYS HARBOR SORT YARD	2411	SO3000131C	GRAYS HARBOR
PORT OF OLYMPIA OCEAN TERMINAL	2411	SO3001168C	THURSTON
HERMANN BROS LOG AND CONST INC	2411	SO3000123C	CLALLAM
PORT OF ANACORTES (FRONTIER IND)	2411	SO3001004C	SKAGIT
HARPO INVESTMENT INC	2411	SO3001111C	GRAYS HARBOR
ECLIPSE LOG YARD EVERGREEN FIBRE IN	2411	SO3000861C	CLALLAM
NORTHWEST HARDWOODS LOG SORT YD CEN	2411	SO3002144C	LEWIS
ARCHITECTURAL WOODS INC	2421	SO3001747C	PIERCE
SAWDUST SUPPLY	2421	SO3002000C	KING
A AND L TOPSOIL INC	2421	SO3002723B	KITSAP
WAYNE DALTON CORP	2421	SO3003283B	LEWIS
ALLEN LOGGING CO	2421	SO3002713B	CLALLAM
CARPINITO BROS INC 1148 N CENTRAL	2421	SO3001954C	KING
NORTH MASON FIBER CO	2421	SO3000359C	MASON

MORTON LUMBER MILL HAMPTON LBR	2421	SO3002521B	LEWIS
RANDLE LUMBER MILL HAMPTON LBR	2421	SO3002522B	LEWIS
MANKE LUMBER CO	2421	SO3000325C	PIERCE
NORTHWEST HARDWOOD SEDRO WOOLLEY	2421	SO3002509B	SKAGIT
PACIFIC FIBRE PRODUCTS INC	2421	SO3000546C	COWLITZ
SIMPSON TIMBER CO COMMENCEMENT BAY	2421	SO3001429C	PIERCE
CASCADE HARDWOOD INC	2421	SO3000628C	LEWIS
MOUNTAIN FIR CHIP CO LONGVIEW FIBR	2421	SO3000371C	ASOTIN
SDS LUMBER CO	2421	SO3001206C	KLICKITAT
ROSS SIMMONS HARDWOOD LUMBER CO	2421	SO3001235C	COWLITZ
TUBAFOR MILL INC	2421	SO3001426C	LEWIS
PACKWOOD LUMBER HAMPTON LUMBER	2421	SO3002523B	LEWIS
PUGET SOUND CHIP CENTER	2421	SO3000331C	PIERCE
GREAT WESTERN LUMBER	2421	SO3000767C	WHATCOM
OAKVILLE FOREST PRODUCTS	2421	SO3000871C	GRAYS HARBOR
SNOW MOUNTAIN MILLS	2421	SO3000644C	SKAGIT
WASHINGTON FOREST PRODUCTS INC	2421	SO3000618C	CLARK
WEYERHAEUSER LUMBERMILL	2421	SO3000370C	PACIFIC
SKOOKUM LUMBER PLANT	2421	SO3000373C	MASON
WEYERHAEUSER GREEN MOUNTAIN SAWMILL	2421	SO3000168C	COWLITZ
WEYERHAEUSER COMPANY ENUM	2421	SO3000511C	KING
HAMPTON LUMBER MILL	2421	SO3000509C	SNOHOMISH
NORTHWEST HARDWOODS LONGVIEW	2421	SO3000506C	COWLITZ
GLENN CUSTOM MILLING	2421	SO3001624C	MASON
SEDRO WOOLEY LUMBER CO	2421	SO3000180C	SKAGIT
SIMPSON TIMBER CO SAWMILL/PLYWOOD	2421	SO3000792C	MASON
PORTAC INC	2421	SO3000326C	PIERCE
CURLEW RELOAD	2421	SO3000193C	FERRY
STIMSON LUMBER COMPANY ARDEN MILL	2421	SO3000194C	STEVENS
PACIFIC HARDWOODS SOUTH BEND CO	2421	SO3000198C	PACIFIC
NORTHWEST HARDWOODS ARLINGTON	2421	SO3000200C	SNOHOMISH
LOUISIANA PACIFIC CORP	2421	SO3000328C	PIERCE
RAYONIER GRAYS HARBOR LUMBER OPER	2421	SO3000130C	GRAYS HARBOR
DAHLSTROM LUMBER CO	2421	SO3000291C	GRAYS HARBOR
WEYERHAEUSER ABERDEEN SAWMILL	2421	SO3001015C	GRAYS HARBOR
KETTLE FALLS LUMBER	2421	SO3000188C	STEVENS
RSG MILL/GRAM MILL	2421	SO3000319C	COWLITZ
GIRARD WOOD PRODUCTS AKA INDUST CUT	2421	SO3001903C	GRAYS HARBOR
SOUND MILL INC	2421	SO3000327C	PIERCE
BARBEE MILL CO INC	2421	SO3000718C	KING
BUSE TIMBER AND SALES INC	2421	SO3000097C	SNOHOMISH
EVERETT BARK + LANDSCAPE SUPPLY INC	2421	SO3002202C	SNOHOMISH
DK TRUCKING + CHIP WILLIS ENT MONTE	2421	SO3001966C	GRAYS HARBOR
TIMBERLAND OPPORTUNITIES	2421	SO3001921C	GRAYS HARBOR
MARYS RIVER LUMBER	2421	SO3001920C	GRAYS HARBOR
LEWIS CO WORK OPPORTUNITY	2421	SO3002115C	LEWIS
HAMBLETON BROS LOG YARD	2421	SO3002129C	CLARK
COLUMBIA FIBER LTD LONGVW FIBER YD	2421	SO3002102C	COWLITZ

SEATTLE SNOHOMISH MILL CO INC	2421	SO3001054C	SNOHOMISH
NORTHWEST HARDWOODS 2 CENTRALIA	2421	SO3002145C	LEWIS
WILKINS KAISER AND OLSEN	2421	SO3001052C	SKAMANIA
CAFFALL BROS LONGVIEW FACILITY	2421	SO3001861C	COWLITZ
DK TRUCKING + CHIP WILLIS ENT SHEL	2421	SO3001640C	MASON
SHEARER BROS CHIPPING INC	2421	SO3001628C	MASON
CANYON LUMBER CO INC	2421	SO3001592C	SNOHOMISH
DK TRUCKING WILLIS ENT HOQUIAM	2421	SO3002031C	GRAYS HARBOR
GMS FOREST PRODUCTS INC	2421	SO3001802C	CLARK
CURTIS POLE COMPANY LLC	2421	SO3001019C	LEWIS
WELCO LUMBER CO	2421	SO3001165C	SNOHOMISH
CAFFALL BROS FOREST PRODUCTS CHEHAL	2421	SO3000830C	LEWIS
SIMPSON TIMBER CO ST YD/SAWMILL 5	2421	SO3000787C	MASON
MORTON FOREST PRODUCTS CO	2421	SO3000389C	LEWIS
CARPINITO BROS LANDSCAPE BARK	2421	SO3001965C	PIERCE
TUMWATER LUMBER CO	2421	SO3004272A	THURSTON
PACIFIC CREST LUMBER	2421	SO3004400A	LEWIS
OLYMPIC WOOD PRODUCTS INC	2421	SO3004294A	MASON
NORTHWEST FOREST PRODUCTS	2421	SO3001662C	PIERCE
CUSTOM MOULDING CO INC	2421	SO3001660C	PIERCE
WEYERHAEUSER SNOQUALMIE	2421	SO3003828B	KING
RK CUSTOM LLC	2421	SO3004086B	MASON
PORTAC PLANER FORKS	2421	SO3004063B	CLALLAM
PACIFIC HARDWOODS SOUTH BEND	2426	SO3000199C	PACIFIC
BEST SHINGLE CO	2429	SO3001887C	GRAYS HARBOR
SHAKERTOWN 1992 INC	2429	SO3002712B	LEWIS
PICKERING INC	2429	SO3000134C	PIERCE
POST SHAKE CO INC	2429	SO3000847C	GRAYS HARBOR
WEST COAST FOREST PRODUCTS ARL	2429	SO3002536B	SNOHOMISH
ROBERT H MIRAU	2429	SO3001058C	GRAYS HARBOR
PETERSON SHAKE CO INC	2429	SO3000631C	GRAYS HARBOR
STIMSON SHELTON OPERATIONS	2429	SO3003805B	LEWIS
A AND B SHAKE MILL	2429	SO3000724C	SKAGIT
SULTAN POST AND POLE	2429	SO3004433A	SNOHOMISH
ROYAL SHAKE INC	2429	SO3001900C	COWLITZ
CROWN PACIFIC MARYSVILLE	2431	SO3001992C	SNOHOMISH
CAMCO INC SHELTON	2431	SO3002342C	MASON
WEATHERVANE WINDOW CO	2431	SO3000171C	KING
BUFFELEN WOODWORKING CO	2431	SO3000096C	PIERCE
JELD WEN INC DBA JELD WEN EVER+NOR	2431	SO3000158C	SNOHOMISH
PRECISION PREHUNG DOOR	2431	SO3001750C	PIERCE
MILLWORK SUPPLY CO	2431	SO3000868C	KING
LIANGA PACIFIC INC	2431	SO3000815C	PIERCE
SAUDER WOOD PRODUCTS INC	2431	SO3000339C	WHATCOM
JOHNSONS MILLWORK INC	2431	SO3001720C	PIERCE
BARMON DOOR AND PLYWOOD INC	2431	SO3001156C	SNOHOMISH
WEST COAST DOOR INC	2431	SO3001772C	PIERCE
JELD-WEN INC DBA YAKIMA DOOR	2431	SO3000164C	YAKIMA

BAYWOOD CABINET INC	2434	SO3002730B	KING
A E DOWNS ENTERPRISES	2434	SO3001896C	KING
PLY TRIM WEST	2435	SO3001917C	PIERCE
TEXTURED FOREST PRODUCTS INC	2435	SO3001798C	CLARK
GN PLYWOOD INC DBA MT BAKER PLY	2435	SO3001392C	WHATCOM
TRUS JOIST A WEYERHAEUSER BUSINESS	2436	SO3002178C	GRAYS HARBOR
HARDEL MUTUAL PLYWOOD CORP	2436	SO3000121C	THURSTON
PACIFIC VENEER LTD	2436	SO3000388C	GRAYS HARBOR
HIGH CASCADE VENEER INC	2436	SO3000342C	SKAMANIA
HARDEL MUTUAL PLYWOOD CORP CHEHALIS	2436	SO3003241B	LEWIS
HOQUIAM PLYWOOD CO INC	2436	SO3001939C	GRAYS HARBOR
SOLID WOOD INC	2436	SO3000179C	THURSTON
SHELTON LAM AND DECK	2439	SO3001053C	LEWIS
WOODINVILLE TRUSS INC	2439	SO3002138C	KING
TRI COUNTY TRUSS INC	2439	SO3002037C	SKAGIT
TRUSS COMPONENTS OF WA INC	2439	SO3000758C	THURSTON
BMC WEST TRUSS PLANT	2439	SO3003857B	SPOKANE
BELL LUMBER AND POLE CO	2439	SO3000092C	SKAGIT
ARMSTRONG LUMBER CO INC	2439	SO3000285C	KING
TRUSS SPAN LBC 021 AUBURN	2439	SO3002079C	KING
NEW TACOMA BOX CO	2441	SO3000808C	PIERCE
SEATTLE TACOMA BOX CO	2441	SO3000791C	KING
RAINIER PALLET AND CRATING CORP AUB	2448	SO3000776C	KING
RAINIER PALLET AND CRATING CORP KEN	2448	SO3000775C	KING
S AND W MFG INC CO	2448	SO3000623C	CLARK
NEPA PALLET AND CONTAINER CO INC	2448	SO3000752C	SNOHOMISH
GIRARD WOOD PRODUCTS	2448	SO3000118C	PIERCE
VANCOUVER MANUFACTURING INC	2448	SO3001796C	CLARK
APPLIED INDUSTRIES INC	2448	SO3000087C	COWLITZ
NORTHWEST CONTAINERS TOLEDO	2448	SO3001977C	LEWIS
ELM STREET INDUSTRIES INC	2449	SO3001824C	COWLITZ
WILLIAMS SCOTSMAN INC	2452	SO3000111C	SNOHOMISH
NORTHWEST WOOD + FIBRE RECOVERY INC	2493	SO3002421C	KING
MARINEFLOATS	2499	SO3001679C	PIERCE
WOOD ENERGY INC	2499	SO3001754C	PIERCE
WILLIS ENTERPRISES PT OF OLYMPIA	2499	SO3003835B	THURSTON
ACE INTERNATIONAL INC	2499	SO3000317C	LEWIS
WEYERHAEUSER TEF	2499	SO3000321C	PIERCE
MARINE DRIVE CHIP YARD	2499	SO3000314C	CLALLAM
TRIANGLE RESOURCES	2499	SO3004490A	CLARK
HOLBROOK INC TACOMA YARD	2499	SO3003856B	PIERCE
SAWARNE LUMBER CO INC FERNDALE	2499	SO3002156C	WHATCOM
SHELTON POLE MFG	2499	SO3004293A	MASON
PUGET SOUND WOOD PRODUCTS HIDDEN VA	2499	SO3003300B	GRAYS HARBOR
MURRAY PACIFIC TIMBER LLC YARD 2	2499	SO3000312C	PIERCE
SWANSON BARK + WOOD PRODUCTS INC	2499	SO3001874C	COWLITZ
W D K LTD AKA WESTERN DRY KILNS	2499	SO3001695C	PIERCE
ISSAQUAH LUMBER INC	2499	SO3002130C	KING

LINDAL BUILDING PRODUCTS	2499	SO3003413B	SKAGIT
LAKE RIVER INDUSTRIAL SITE	2499	SO3001835C	CLARK
BARKERS WOODCHIPPING SERVICE INC	2499	SO3001569C	WHATCOM
HOLBROOK INC OLYMPIA PUBLIC YARD	2499	SO3003855B	THURSTON
SNAPCO INCORP HUMPTULIPS	2499	SO3002231C	GRAYS HARBOR
RECOVERY 1	2499	SO3001386C	PIERCE
COLUMBIA VISTA CORP	2499	SO3002161C	CLARK
MAYR BROS LUMBER HOQUIAM SITE	2499	SO3001158C	GRAYS HARBOR
PORTAC INC BEAVER DIVISION	2499	SO3003084B	CLALLAM
BURIEN BARK LLC	2499	SO3004244A	KING
GREEN CROW SHELTON LOG YARD	2499	SO3004286A	MASON
SILKSCREEN FRAME INC	2499	SO3002134C	SKAGIT
CANFOR USA BELLINGHAM	2499	SO3002221C	WHATCOM
INTERNATIONAL WOOD INDUSTRIES	2499	SO3002347C	YAKIMA
CLASSIC HARDWOODS	2499	SO3002889B	LEWIS
PLUM CREEK OLYMPIA YARD	2499	SO3004001B	THURSTON
EVERETT FUEL + LUMBER DISTRIBUTORS	2499	SO3002220C	SNOHOMISH
PREMIUM PAK	2499	SO3001907C	GRAYS HARBOR
NW FOREST FIBRE PRODUCTS INC	2499	SO3004431A	LEWIS
WEYERHAEUSER BAY CITY SORTING YARD	2499	SO3000318C	GRAYS HARBOR
GIRARD CUSTOM COATERS INC	2499	SO3000117C	PIERCE
AMERICAN MILLWORK INC	2499	SO3004457A	SNOHOMISH
CASCADE WAREHOUSE COMPANY	2499	SO3004468A	LEWIS
SUNLAND BARK AND TOPSOIL CO	2499	SO3002905B	SKAGIT
AN WEST	2511	SO3000626C	SKAGIT
BPI INC	2521	SO3001504C	KING
TRI-WAY INDUSTRIES	2599	SO3004489A	KING
TRSW PORTLAND AVE	2599	SO3003073B	PIERCE
RAYONIER PT ANGELES INDUSTRIAL	2611	SO3003611B	CLALLAM
CORNWALL WAREHOUSE	2611	SO3000115C	WHATCOM
SMURFIT STONE CONTAINER CORP	2631	SO3001180C	PIERCE
GLACIER PACKAGING	2653	SO3002002C	PIERCE
WILLAMETTE INDUSTRIES BELLEVUE CORR	2653	SO3001328C	KING
LONGVIEW FIBRE SEATTLE	2653	SO3000206C	KING
WEYERHAEUSER CO UNION GAP	2653	SO3000167C	YAKIMA
COMMENCEMENT BAY CORRUGATED	2653	SO3001162C	PIERCE
WEYERHAEUSER PAPER CO OLY	2653	SO3000559C	THURSTON
GEORGIA PACIFIC	2653	SO3000116C	THURSTON
SHEETS + GRAPHIC SHEETS UNLIMITED	2653	SO3002151C	KING
CASCADE SONOCO INC TAC	2655	SO3000458C	PIERCE
SONOCO PRODUCTS CO WOODLAND	2655	SO3003460B	COWLITZ
NEWARK PAPERBOARD PROD VAN	2655	SO3001292C	CLARK
JEFFERSON SMURFIT CORPORATION US	2657	SO3000551C	KING
PACIFIC COATING + LAMINATING	2672	SO3003428B	COWLITZ
DYNEA OVERLAYS INC	2672	SO3001441C	PIERCE
BEMIS CO INC	2674	SO3000093C	CLARK
ASSOCIATED HYGIENIC PRODUCTS LLC	2676	SO3000104C	CLARK
MICHELSEN PACKAGING YAK	2679	SO3000811C	YAKIMA

RAINIER PLYWD DBA RAINIER RICHLITE	2679	SO3001971C	PIERCE
THE SEATTLE TIMES N CREEK FACILITY	2711	SO3000181C	KING
ADPRO LITHO INC	2752	SO3001138C	SNOHOMISH
COLORGRAPHICS	2752	SO3003679B	KING
ATOFINA CHEMICALS INC	2812	SO3001003C	PIERCE
PRAXAIR INC	2813	SO3000185C	PIERCE
AIRCO GASES DIV OF BOC SEATTLE	2813	SO3001219C	KING
AIR PRODUCTS MANUFACTURING CORP	2813	SO3001182C	PIERCE
AIR LIQUIDE FINLEY CO2	2813	SO3004399A	BENTON
BOCO GASES	2813	SO3001186C	CLARK
PRAXAIR INC FERNDALE	2813	SO3000558C	WHATCOM
AIR LIQUIDE	2813	SO3001919C	KING
PQ CORP	2819	SO3000330C	PIERCE
SEAFAB METALS CO VANCOUVER	2819	SO3003597B	CLARK
OLYMPIC CHEMICAL CORP	2819	SO3002864B	KING
SOLVAY INTEROX	2819	SO3000570C	COWLITZ
PRAXAIR SPECIALTY CERAMICS	2819	SO3003626B	KING
KEMWATER NA SPOKANE PLANT	2819	SO3000187C	SPOKANE
J M HUBER CORP	2819	SO3001974C	COWLITZ
ROHM AND HAAS COMPANY	2819	SO3004048B	GRAYS HARBOR
NORTH AMERICAN COMPOSITES BLEND	2821	SO3000769C	KING
QCM CO	2821	SO3000494C	KING
ARGENT CHEMICAL LABORATORIES	2834	SO3002110C	KING
HOLLISTER STIER LABORATORIES	2834	SO3000204C	SPOKANE
WESTERN CHEMICAL INC	2834	SO3000380C	WHATCOM
FORMULA CORP	2842	SO3000630C	KING
KLEENCO PRODUCTS INC	2842	SO3000211C	KING
PIONEER AMERICAS INC	2842	SO3001694C	PIERCE
JCI JONES CHEMICALS INC TACOMA	2842	SO3000213C	PIERCE
ASAHIPEN AMERICA INC	2851	SO3000089C	KING
GACO WESTERN INC	2851	SO3000113C	KING
JELD-WEN COATINGS TUKWILA	2851	SO3003402B	KING
PARKER PAINT MFG CO INC	2851	SO3000197C	PIERCE
FARWEST PAINT MFG CO	2851	SO3000863C	KING
COOK COMPOSITES AND POLYMERS CO	2851	SO3002908B	SNOHOMISH
LILLY INDUSTRIES INC	2851	SO3001172C	KING
NOVEON KALAMA INC	2865	SO3000504C	COWLITZ
AGRIUM FERTILIZER OPER FINLEY	2873	SO3004123A	BENTON
AGRIUM USA INC AND AGRIUM INC	2873	SO3001427C	BENTON
ALASKA FISH FERTILIZER CO	2873	SO3002898B	KING
RSA MICRO TECH INC	2875	SO3002035C	SKAGIT
WOLFKILL FEED AND FERTILIZER STAN	2875	SO3001458C	SNOHOMISH
WOLFKILL FEED AND FERTILIZER OTH	2875	SO3001453C	ADAMS
WOLFKILL FEED AND FERTILIZER MON	2875	SO3001544C	SNOHOMISH
WHATCOM FARMERS COOP	2875	SO3001464C	WHATCOM
SUNSET MATERIALS INC	2875	SO3003785B	KING
REGIONAL COMPOSTING FACILITY SPO	2875	SO3002204C	SPOKANE
SUNSET MATERIALS INC RENTON	2875	SO3003784B	KING

SKAGIT FARMERS SUPPLY	2875	SO3001456C	SKAGIT
NU CHEM LTD AT CENTRAL FERRY	2875	SO3001061C	WHITMAN
BUDS TOPSOIL INC BELLEVUE	2875	SO3002324C	KING
LAKE INDUSTRIES	2875	SO3003488B	SNOHOMISH
CEDAR GROVE COMPOSTING MAPLE VAL	2875	SO3002487C	KING
CEDAR GROVE COMPOST WEBSTER YARD	2875	SO3002641B	KING
RIVERSIDE TOPSOIL	2875	SO3003612B	SNOHOMISH
NU CHEM LTD CENTRAL FERRY	2879	SO3002644A	WHITMAN
HICKSON CORP	2879	SO3000125C	COWLITZ
ATWOOD ADHESIVES INC	2891	SO3000774C	KING
NORTHWEST ENERGETIC SERVICES	2892	SO3000169C	SPOKANE
AUSTIN POWDER CO	2892	SO3000090C	LEWIS
US INK A DIV OF SUN CHEMICAL CORP	2893	SO3001334C	KING
INX INTERNATIONAL INK CO SEATTLE	2893	SO3000129C	KING
FOSECO METALLURGICAL INC	2899	SO3000354C	LEWIS
KEMIRON NORTH AMERICA	2899	SO3003812B	COWLITZ
ONDEO NALCO	2899	SO3004270A	CLARK
DEGUSSA CONSTRUCTION CHEMICALS OPER	2899	SO3000505C	KING
I P CALLISON AND SONS	2899	SO3001617C	LEWIS
BETZ LABORATORIES INC	2899	SO3000094C	CLARK
VININGS INDUSTRIES INC	2899	SO3001125C	CLARK
CIBA SPECIALTY CHEMICALS PLANT	2899	SO3003986B	COWLITZ
PABCO ROOFING PRODUCTS	2952	SO3002401C	PIERCE
IKO PACIFIC INC INDUST	2952	SO3003375B	WHATCOM
CASCADE ASPHALT SEALING CO	2952	SO3002059C	PIERCE
FIELDS CORPORATION	2952	SO3001279C	PIERCE
APEX ENVIRONMENTAL INC HOQUIAM	2992	SO3002213C	GRAYS HARBOR
HOUGHTON INTERNATIONAL	2992	SO3000571C	COWLITZ
SPENCER ENVIRONMENTAL SUMNER	2999	SO3004376A	PIERCE
METSO PAPER	3069	SO3000144C	KING
STOWE WOODWARD CO	3069	SO3000247C	COWLITZ
TEX ENTERPRISES INC	3069	SO3000360C	KING
ACHILLES USA INC	3081	SO3000136C	SNOHOMISH
ULTRA POLY INC	3081	SO3001735C	PIERCE
TREDEGAR FILM PRODUCTS US LLC	3081	SO3000254C	PIERCE
PILLER PLASTICS INC	3083	SO3000282C	CLARK
GL&V PULP GROUP INC	3084	SO3000070C	CLARK
PW PIPE (PACIFIC WESTERN EXTRUDED)	3084	SO3000797C	PIERCE
HANCOR INC BRANCH 15	3084	SO3000053C	THURSTON
ADVANCED DRAINAGE SYSTEMS INC	3084	SO3000137C	CLARK
SUPERLON PLASTICS CO INC	3084	SO3000999C	PIERCE
FAMILIAN INDUSTRIAL PLASTICS	3084	SO3004479A	CLARK
PACIFIC WESTERN EXTRUDED PLASTIC SU	3084	SO3000798C	YAKIMA
FIBREX CORP	3084	SO3000052C	SKAGIT
WESTECH BUILDING PRODUCTS INC	3084	SO3003149A	CLARK
SHAPES OF PLASTICS	3085	SO3000587C	PIERCE
NORTHWEST CONTAINERS	3085	SO3000236C	PIERCE
PREMIER INDUST DBA WESTERN INSULFOA	3086	SO3000235C	KING

PREMIER BUILDING SYSTEMS	3086	SO3001689C	PIERCE
EXCELSIOR PACKAGING WEST	3086	SO3003984B	CLARK
DOLCO PACKAGING CORP	3086	SO3002514B	CHELAN
JOHNS MANVILLE INTERNATIONAL INC	3086	SO3002880B	KING
FOAMEX KENT	3086	SO3004517A	KING
PRECISION LABORATORY PLASTICS	3086	SO3004507A	LEWIS
STARROW ENTERPRIESES	3088	SO3002058C	KING
MAAX HYDRO SWIRL MFG CORP	3088	SO3000694C	WHATCOM
DISCOVERY SPAS INC	3088	SO3000377A	CLARK
AMERICAN REINFORCED PLASTICS INC	3088	SO3000324C	PIERCE
OCEAN KAYAK DIV OF OLD TOWN CANOE	3089	SO3002243C	WHATCOM
ACCEL PLASTICS	3089	SO3002048C	KING
ERSHIGS INC	3089	SO3000048C	WHATCOM
PACTIV CORP	3089	SO3003613B	CHELAN
SAINT GOBAIN PERFORMANCE PLASTICS	3089	SO3001546C	KING
LIFESTYLES WOODINVILLE	3089	SO3002061C	KING
MILGARD MFG VINYL EXTRUSION M + M	3089	SO3001792C	PIERCE
MCCONKEY AND CO	3089	SO3002526B	PIERCE
POLYFORM US LTD KENT	3089	SO3001967C	KING
MOHAWK NORTHERN PLASTICS INC	3089	SO3000722C	KING
RACEWAY TECHNOLOGY	3089	SO3001690C	PIERCE
DAVIDSON PLASTICS CORP	3089	SO3003097B	PIERCE
MILGARD WINDOWS	3089	SO3001706C	PIERCE
TOOL GAUGE AND MACHINE WORKS INC	3089	SO3001734C	PIERCE
CASCADE PLASTICS CO INC	3089	SO3003162B	PIERCE
VAUPELL INDUSTRIAL PLASTICS INC	3089	SO3000721C	KING
MOLDED FIBER GLASS CO NORTHWEST	3089	SO3002606B	SKAMANIA
NORWESCO INC	3089	SO3003383B	CLARK
ARCA SYSTEMS	3089	SO3000700C	PIERCE
QUIL CEDA TANNING CO INC	3111	SO3001983C	SNOHOMISH
SPECTRUM GLASS CO	3211	SO3001113C	SNOHOMISH
HOT CELL SERVICES CORP	3211	SO3002876B	KING
SAINT GOBAIN CONTAINERS LLC	3221	SO3001134C	KING
HERAEUS SHIN ETSU AMERICA	3229	SO3000220C	CLARK
ALSIDE WINDOWN CO NORTHWEST	3231	SO3000541C	SNOHOMISH
MILGARD TEMPERING	3231	SO3000074C	PIERCE
CHINOOK INDUSTRIAL PARK	3231	SO3000538C	YAKIMA
HARTUNG GLASS	3231	SO3002146C	KING
THE PRYOR GIGGEY CO	3241	SO3000785C	LEWIS
MUTUAL MATERIAL NEW CASTLE BRICK PL	3251	SO3000362C	KING
EASTSIDE MASONRY PRODUCTS MONROE	3271	SO3003075B	SNOHOMISH
MUTUAL MATERIALS KENT BLOCK PLANT	3271	SO3000364C	KING
CENTRAL PRE MIX CONCRETE PRODUCTS	3272	SO3002005C	KING
FOG TITE INC	3272	SO3000474C	KING
NATURAL CREATONS INC	3272	SO3004065B	KING
MONIERLIFETILE LLC	3272	SO3004271A	PIERCE
HANSON PIPE AND PRODUCTS, INC.	3272	SO3000241C	PIERCE
EXPRESS PIPE AND PRECAST	3272	SO3002970B	KITSAP

PACIFIC CONCRETE PRODUCTS AUBURN	3272	SO3002036C	KING
K AND K CONCRETE PRODUCTS	3272	SO3004478A	SNOHOMISH
CENTRAL PRE MIX PRESTRESS CO SPO	3272	SO3002515B	SPOKANE
QUALITY CONCRETE PRODUCTS INC	3272	SO3000795C	SNOHOMISH
ISG RESOURCES INC CENTRALIA	3272	SO3000387C	LEWIS
UTILITY VAULT CO	3272	SO3000258C	KING
BARKSHIRE YARD	3272	SO3003848B	KING
QUIKRETE WASHINGTON	3272	SO3004132A	PIERCE
JAMES HARDIE BUILDING PRODUCTS IND	3272	SO3003297B	PIERCE
GENE OS' GARDEN ARTS	3272	SO3001947C	COWLITZ
JAMES HARDIE GYPSUM	3275	SO3000056C	KING
G P GYPSUM CORPORATION	3275	SO3000045C	PIERCE
PACIFIC GRINDING WHEEL CO INC	3291	SO3000279C	SNOHOMISH
TRU GRIT FACILITY	3291	SO3001497C	PIERCE
CANAM MINERALS	3291	SO3001545C	PIERCE
UNIMIN CORP HAMILTON PLANT	3295	SO3002428C	SKAGIT
THERMAFIBER LLC	3296	SO3000305C	PIERCE
HAMILTON MATERIALS LLC	3299	SO3003415B	COWLITZ
SHOPE ENTERPRISES INC	3299	SO3003099B	PIERCE
AMERICAN SILICON TECHNOLOGIES	3313	SO3002742B	DOUGLAS
DAVIS WIRE CORP	3315	SO3000041C	KING
STEELSCAPE INC.	3316	SO3002913B	COWLITZ
ROEMER ELECTRIC STEEL FOUNDRY	3325	SO3004515A	COWLITZ
MELTEC DIVISION OF YOUNG CORP	3325	SO3000639C	KING
VARICAST INC	3325	SO3000922C	CLARK
QUALI CAST FOUNDRY	3325	SO3002513B	LEWIS
ALCOA INTALCO WORKS FERNDALE	3334	SO3003815B	WHATCOM
NON FERROUS METALS	3341	SO3003239B	KING
HALLMARK REFINING CORP	3341	SO3001510C	SKAGIT
KB ALLOYS INC	3355	SO3002453C	CHELAN
SANDVIK SPECIAL METALS FINLEY	3356	SO3000518C	BENTON
PACE INDUSTRIES PUGET DIV INC	3363	SO3000266C	PIERCE
ADVANCED ALUMINUM LLC	3365	SO3002932B	CHELAN
PENTZ DESIGN PATTERN + FOUNDRY INC	3365	SO3000281C	KING
ROBERT MORTENSON FOUNDRY	3366	SO3000078C	KING
PACIFIC METALLURGICAL INC	3398	SO3000699C	KING
ALMET INC	3398	SO3000684C	KING
RAMTREAT METAL TECHNOLOGY	3398	SO3001173C	KING
SCANCO INC	3398	SO3000662C	KING
CUSTOM IRON CO	3399	SO3001525C	KING
PIONEER INDUSTRIES	3399	SO3001897C	KING
SEACAST INC	3399	SO3000936C	SNOHOMISH
BALL METAL BEVERAGE CONTAINER CO	3411	SO3000244C	KING
REXAM BEVERAGE CAN COMPANY	3411	SO3001187C	KING
TOMRA PACIFIC KENT RECYCLING PLANT	3411	SO3004524A	KING
CROWN BEVERAGE PACKAGING INC	3411	SO3000039C	WALLA WALLA
CROWN CORK AND SEAL CO INC SEATTLE	3411	SO3001506C	KING
CROWN CORK AND SEAL CO INC OLYMPIA	3411	SO3000231C	THURSTON

APEX FORGE AND TOOL CO	3423	SO3000620C	PIERCE
ECLIPSE GEAR AND SUPPLY	3429	SO3002962B	SNOHOMISH
GENIE INDUSTRIES MOSES LK HANGERS	3431	SO3003901B	GRANT
A O SMITH WATER PRODUCTS CO	3433	SO3003387B	KING
FAR WEST FABRICATORS	3433	SO3001307C	YAKIMA
LENNOX HEARTH PRODUCTS INC	3433	SO3003737B	SKAGIT
OREGON IRON WORKS INC 3001	3441	SO3000275C	CLARK
DAYTON SUPERIOR DAYTON RICHMOND	3441	SO3004481A	KING
INDUSTRIAL SALES AND SERVICE INC	3441	SO3001876C	GRAYS HARBOR
PRUDENTIAL STEEL INC	3441	SO3004050B	COWLITZ
STREICH BROS INC	3441	SO3000651C	PIERCE
GLOBAL INTERMODAL SYSTEMS	3441	SO3001330C	KING
OREGON IRON WORKS 3515	3441	SO3000276C	CLARK
UNITED IRON WORKS	3441	SO3002137C	KING
GRAHAM STEEL CORP	3441	SO3001120C	KING
AAA WELDING CO FAURO CORP	3441	SO3001932C	KING
WAITE SPECIALTY MACHINE INC 1356	3441	SO3000919C	COWLITZ
NORDIC MACHINE AND MFG INC	3441	SO3000964C	KING
WESTERN STEEL FABRICATORS	3441	SO3001795C	PIERCE
STANDARD STEEL FABRICATING CO INC	3441	SO3000617C	KING
GRATING FABRICATORS INC	3441	SO3002694B	CLARK
JESSE ENGINEERING CO	3441	SO3000066C	PIERCE
R D OLSON MFG INC	3441	SO3000773C	COWLITZ
WAITE SPECIALTY MACHINE INC 1160	3441	SO3000920C	COWLITZ
UNIVERSAL STRUCTURAL INC	3441	SO3000257B	CLARK
JESSE YARD II	3441	SO3000063C	PIERCE
JESSE YARD III PT OF TACOMA 424	3441	SO3000065C	PIERCE
WELD INC DBA WAYRON	3441	SO3001873C	COWLITZ
MID COLUMBIA ENGINEERING TECHNOLOGI	3441	SO3000082C	KING
KEISER STEEL FABRICATIONS INC	3441	SO3000068C	KING
ALUMINITE NORTHWEST	3442	SO3002223C	LEWIS
MORSE CONSTRUCTION GROUP INC	3443	SO3004398A	SNOHOMISH
PSF MECHANICAL INC	3443	SO3000264C	KING
PSF INDUSTRIES INC 65 S HORTON	3443	SO3000265C	KING
ALASKAN COPPER WORKS	3443	SO3000139C	KING
BALLARD SHEET METAL WORKS INC	3443	SO3000902C	KING
MORFAB CO INC WOODINVILLE	3443	SO3002030C	KING
THOMPSON METAL FAB INC	3443	SO3000252C	CLARK
RELIABLE STEEL INC	3443	SO3004476A	THURSTON
SCHNEIDER SIMPSON SHEET METAL	3444	SO3001714C	PIERCE
CASCADE CONTAINER FAB CO	3444	SO3000031C	CLARK
S AND R SHEET METAL INC	3444	SO3001844C	COWLITZ
SPRAGUE METAL CO	3444	SO3000663C	KING
AMERICAN STEEL LLC	3444	SO3001948C	KING
SKYLINE ELECTRIC AND MFG CO INC	3444	SO3000930C	KING
SPRAGUE METAL	3444	SO3004473A	KING
NORTHWEST GRATING PRODUCTS	3446	SO3001918C	KING
SHOEMAKER MFG CO CLE ELUM	3446	SO3002331C	KITTITAS

IMSA STEEL BUILDING PRODUCTS TACOMA	3448	SO3001645C	PIERCE
CANAM/SUN STEEL BUILDINGS	3448	SO3002955B	YAKIMA
TITANIUM SPORTS TECHNOLOGIES	3449	SO3003083B	BENTON
IKS SYSTI MATIC KIRKLAND	3449	SO3004319A	KING
HARBOR MACHINE AND FABRICATING	3449	SO3001904C	GRAYS HARBOR
PROMETCO INC WOODINVILLE	3449	SO3000633C	SNOHOMISH
WILSON PRODUCTS	3462	SO3002094C	KING
JORGENSEN FORGE CORPORATION	3462	SO3001196C	KING
JORGENSEN FORGE CORP	3462	SO3003231B	KING
TC SYSTEMS INC	3471	SO3000762C	SNOHOMISH
ASKO PROCESSING INC	3471	SO3000837C	KING
PRODUCTION PLATING INC	3471	SO3002068C	SNOHOMISH
COLOR TECH	3471	SO3000898C	KING
CB FINISHING	3471	SO3002274C	KING
HYTEK FINISHES CO	3471	SO3000819C	KING
HYTEK FINISHES COMPANY	3471	SO3004049B	SNOHOMISH
PROTECTIVE COATING INC	3471	SO3000263C	KING
ACE GALVANIZING INC 41ST	3479	SO3000153C	KING
CALVERT INDUSTRIES INC	3479	SO3003153B	SNOHOMISH
PUGET SOUND COATINGS	3479	SO3002142C	KING
ACE GALVANIZING INC 96TH	3479	SO3000154C	KING
NORTHWEST ETCH TECHNOLOGY INC	3479	SO3000270C	PIERCE
STEEL PAINTERS INC	3479	SO3001871C	COWLITZ
WESTERN COATING INC	3479	SO3001981C	KING
BIG E BULLETS DBA RAINIER BALLISTIC	3482	SO3001996C	PIERCE
FLOWSERVE/STEAM SUPPLY	3491	SO3003766B	PIERCE
ROMAC INDUSTRIES BOTHELL	3494	SO3003780B	KING
JUSTESEN IND INC	3496	SO3000513C	WHATCOM
HARBOR SAW AND SUPPLY FAB SHOP	3496	SO3001964C	GRAYS HARBOR
WEST COAST WIRE + ROPE RIGGING INC	3496	SO3002111C	KING
GRINNELL FIRE PROTECTION CO	3498	SO3001435C	KING
WESTERN PNEUMATIC TUBE CO	3498	SO3000259C	KING
HARDER PIPE CO	3498	SO3000055C	CLARK
HOBART BAKERY SYSTEMS	3499	SO3003514B	PIERCE
SEATTLE REFRIGERATION + MFG AKA AVJ	3499	SO3001958C	KING
GLOBE MACHINE ST PAUL	3499	SO3001717C	PIERCE
URBAN ACCESSORIES INC	3499	SO3004446A	PIERCE
TEMTCO STEEL DIV TAYLOR GROUP	3499	SO3004449A	PIERCE
DENNYS MACHINE INC	3499	SO3004134A	COWLITZ
CONTAINER STORAGE INC THORNE RD	3499	SO3002790B	PIERCE
EDCO INC	3499	SO3000893C	SKAGIT
PATRIOT FIRE PROTECTION INC	3499	SO3003400B	PIERCE
TRAVIS INDUSTRIES INC	3499	SO3001848C	KING
AMERICAN BOILER WORKS INC	3499	SO3000839C	SNOHOMISH
MILLER FABRICATION AUBURN	3499	SO3002249C	KING
SHAREWAY INDUSTRIES INC	3499	SO3002080C	KING
SEATTLE BOILERWORKS INC MYRTLE ST	3499	SO3002208C	KING
CONCRETE AND STEEL SYSTEMS	3499	SO3001650C	PIERCE

COMMERCIAL REPAIR AND MACHINE WORKS	3499	SO3003409B	CLARK
A 1 PRECISION	3499	SO3001001C	CLARK
NORDICK DIVISION OF YOUNG	3499	SO3000640C	KING
KORVAN INDUSTRIES INC	3523	SO3002116C	WHATCOM
GENIE INDUSTRIES MOOSEWERKS	3531	SO3003596B	KING
RAMCO CONSTRUCTION TOOLS	3531	SO3001174C	KING
MARKEY MACHINERY CO INC	3531	SO3000972C	KING
GENIE INDUSTRIES SOUTH CAMPUS	3531	SO3003593B	KING
PACIFIC COMMERCIAL EQUIPMENT	3531	SO3004475A	SNOHOMISH
GENIE INDUSTRIES BLDG 10	3531	SO3003837B	KING
GENIE INDUSTRIES MAIN CAMPUS	3531	SO3003594B	KING
GENIE INDUSTRIES ALUMINUM BLDG 11	3531	SO3003792B	KING
GENIE SERVICES BLDG B	3531	SO3003793B	KING
GENIE INDUSTRIES BUILDING 5	3531	SO3003595B	KING
KRAUSE MFG INC	3535	SO3000369C	WHATCOM
CLARKLIFT OF WASHINGTON/ALASKA INC	3537	SO3001953C	KING
PRECISION MACHINE WORKS INC	3541	SO3001688C	PIERCE
CUSTOM GEAR INC	3541	SO3000040C	KING
CAMANO MOLD INC	3544	SO3000622C	ISLAND
GLOBE MACHINE	3553	SO3002128C	PIERCE
USNR WOODLAND	3553	SO3000240C	COWLITZ
PAUL SCHURMAN MACHINE INC	3554	SO3000243C	CLARK
PETES EQUIPMENT	3559	SO3002735B	KING
LORTONE INC	3559	SO3000514C	KING
MIKRON IND INC	3559	SO3000075C	KING
PACO PUMPS PCC FLOW TECHNOLIGIES LP	3561	SO3000801C	KING
FORMOST PACKAGING MACHINES INC	3565	SO3000742C	KING
INTECH ENTERPRISES INC	3565	SO3001820C	CLARK
THE GEAR WORKS SEATTLE INC	3566	SO3000763C	KING
TALLY PRINTER CORP	3577	SO3000973C	KING
HEWLETT PACKARD VANCOUVER DIV	3577	SO3000982C	CLARK
COLMAC INDUSTRIES INC	3582	SO3000037C	STEVENS
COLMAC COIL MFG INC	3585	SO3000036C	STEVENS
CASCADE HYDRAULICS AND MACHINE INC	3593	SO3001859C	COWLITZ
HYDRAULIC SERVICE INC	3593	SO3001857C	COWLITZ
THE CHEMITHON CORP	3599	SO3000033C	KING
IDEAL MACHINE AND MFG INC	3599	SO3001732C	PIERCE
CENTRAL FABRICATION INC	3599	SO3002286C	KING
POWERTILT CO DIV OF HELAC	3599	SO3002477C	KING
ENGSTROM MACHINE WORKS INC	3599	SO3002198C	KING
METAL FORM INC	3599	SO3001753C	KING
MACHINE DESIGN AND ESTIMATES INC	3599	SO3000768C	KING
TECH MARINE ENTERPRISES INC	3599	SO3000784C	KING
AUTOMATED SYSTEMS OF TACOMA INC	3599	SO3001739C	PIERCE
HEGEWALD INC	3599	SO3002782B	CLARK
ELECTRO INC	3599	SO3003370B	CLARK
NICHOLSON ENGINEERING CO 680 E 11TH	3599	SO3001681C	PIERCE
BENNETT MACHINERY INC	3599	SO3001670C	PIERCE

WOODWARD AND WHITE MFG	3599	SO3001663C	PIERCE
GORLEY'S PRECISION MACHINE	3599	SO3001930C	COWLITZ
MIKES WELDING OLYMPIA	3599	SO3002183C	THURSTON
HARBOR ISLAND MACHINE WORKS INC	3599	SO3000054C	KING
MCPAUL MACHINE WORKS INC	3599	SO3000080C	LEWIS
PRECISION ENGINEERING INC	3599	SO3001925C	KING
PROGRESSIVE MACHINE WORKS 1/97	3599	SO3002868B	PIERCE
INDUSTRIAL AUTOMATION INC	3599	SO3001949C	KING
TIERNEY ELEC MFG CO	3612	SO3000253C	KING
NEMCO ELECTRIC CO	3645	SO3000081C	KING
MATSUSHITA KOTOBUKI	3651	SO3000685C	CLARK
ZUMAR INDUSTRIES	3669	SO3001780C	PIERCE
CIRCUIT PARTNERS	3672	SO3002143C	KING
WAFERTECH LLC	3674	SO3003032B	CLARK
NLIGHT PHOTONICS	3674	SO3004394A	CLARK
BOEING ELECTRONICS CENTER	3679	SO3000147C	KING
SAINT GOBAIN	3679	SO3003813B	CLARK
TOYOCOM LONGVIEW PLANT	3679	SO3004440A	COWLITZ
SOUND BATTERY CO INC	3691	SO3000245C	PIERCE
SHARP LABORATORIES OF AMERICA	3699	SO3001398C	CLARK
KENWORTH TRUCK CO RENTON	3711	SO3000858C	KING
KENWORTH TRUCK CO TUK	3711	SO3001784C	KING
ATTBAR INC RIDGEFIELD	3713	SO3002351C	CLARK
PACIFIC UTILITY EQUIPMENT CO	3713	SO3001901C	KING
CAMBRIDGE INDUSTRIES	3713	SO3000071C	KING
STAR TRANSPORT TRAILERS INC	3715	SO3000246C	YAKIMA
BF GOODRICH LANDING GEAR DIV	3721	SO3003714B	SNOHOMISH
NORTH BOEING FIELD	3721	SO3000226C	KING
BOEING CO EVERETT BLDG 40 37	3721	SO3001143C	SNOHOMISH
BOEING COMPANY RENTON PLANT	3721	SO3000232C	KING
BOEING HARBOUR POINTE	3721	SO3000376C	SNOHOMISH
BOEING SOUTH PARK FACILITY	3721	SO3001009C	KING
BOMARC SITE BOEING	3721	SO3000379C	SNOHOMISH
BOEING MILITARY FLIGHT CENTER	3721	SO3000150C	KING
GOODRICH AVIATION TECH SERV INC H2	3724	SO3001850C	SNOHOMISH
GOODRICH AVIATION TECH SRV INC H1/3	3724	SO3001851C	SNOHOMISH
PRECISION ENGINES CORPORATION	3724	SO3000548C	SNOHOMISH
GOODRICH AVIATION TECH SERV INC 30	3728	SO3000520C	KING
MONROE MACHINED PRODUCTS INC	3728	SO3000653C	KING
BF GOODRICH CARBON BRAKE FACILITY	3728	SO3003456B	SPOKANE
BOEING DEVELOPMENTAL CENTER	3728	SO3000146C	KING
BOEING SPACE CENTER	3728	SO3000481C	KING
STEARNS CO	3728	SO3000545C	KING
EXOTIC METALS FORMING CO	3728	SO3000050C	KING
HEXCEL CORP 196TH ST	3728	SO3000227C	KING
BOEING FABRICATION DIV	3728	SO3000221C	KING
BOEING SPARES DISTRIBUTION CENTER	3728	SO3000225C	KING
BOEING PLANT II	3728	SO3000482C	KING

NORTHWEST GEARS INC	3728	SO3000960C	SNOHOMISH
TYEE AIRCRAFT MCKECHNIE GROUP	3728	SO3000256C	SNOHOMISH
PRESSCO PRODUCTS	3728	SO3000543C	KING
BOEING THOMPSON SITE	3728	SO3000148C	KING
HIRSCHLER MFG INC	3728	SO3000664C	KING
HEXCEL CORP 84TH AVE S	3728	SO3000228C	KING
ALLFAB AEROSPACE INC	3728	SO3000907C	SNOHOMISH
MODERN MFG INC RENTON	3728	SO3002164C	KING
SPECTRA LUX CORP	3728	SO3000703C	KING
PUGLIA ENGINEERING INC	3731	SO3002839A	PIERCE
ADMIRAL MARINE CONSTRUCTION INC	3731	SO3002896B	CLALLAM
LAKE UNION DRYDOCK CO	3731	SO3000516C	KING
NICHOLS BROS BOAT BUILDERS INC	3731	SO3003161B	ISLAND
WDOT EAGLE HARBOR REPAIR FACILITY	3731	SO3001066C	KITSAP
JACOBSON TERMINALS INC	3732	SO3000459C	KING
WESTPORT SHIPYARD INC	3732	SO3000217C	GRAYS HARBOR
NORTHCOAST YACHTS INC	3732	SO3001119C	PIERCE
PACIFIC SKIFFS INC	3732	SO3002242C	SNOHOMISH
NORDIC TUGS INC	3732	SO3000676C	SKAGIT
ARIMA MARINE	3732	SO3000350C	KING
C DORY INC	3732	SO3000351C	KING
THE BOATWRIGHT	3732	SO3001224C	KING
LANGLEY DOCK FACILITY	3732	SO3001509C	ISLAND
CHRISTENSEN SHIPYARDS LTD	3732	SO3000034C	CLARK
PUGLIA ENGINEERING	3732	SO3001661B	PIERCE
MARINE FLUID SYSTEMS INC	3732	SO3002172C	KING
ALMAR INC	3732	SO3001277C	PIERCE
B AND J FIBERGLASS	3732	SO3003237B	WHATCOM
KVICHAK MARINE	3732	SO3003761B	KING
RAIL CAR WASHINGTON	3743	SO3001736C	LEWIS
COAST ENGINE AND EQUIPMENT CORP	3743	SO3000035C	PIERCE
WEYERHAEUSER HEADQUARTERS SHOP	3743	SO3000916C	COWLITZ
EZ LOADER BOAT TRAILERS INC	3792	SO3000051C	SPOKANE
WESTERN RECREATIONAL VEHICLES YAK	3792	SO3004527A	YAKIMA
HONEYWELL	3812	SO3001530C	KING
FLUKE CORPORATION SEAWAY BLVD	3825	SO3000460C	SNOHOMISH
FLUKE CORPORATION EVERGREEN WAY	3825	SO3000461C	SNOHOMISH
ADVANCED TECHNOLOGY LABORATORIES	3841	SO3000138C	SNOHOMISH
NORTHWEST PODIATRIC LABORATORY	3842	SO3004247A	WHATCOM
PRECOR WOODINVILLE W1	3949	SO3000272C	KING
K2 CORP	3949	SO3000515C	KING
SANDVIK SPECIAL METALS CORP TITANIU	3949	SO3000519C	BENTON
O'BRIEN INT DIV OF EARTH + OCEAN SP	3949	SO3000278C	KING
BURKE GIBSON INC	3993	SO3002938B	KING
AMERICAN NEON	3993	SO3000905C	PIERCE
PLUMB SIGN INC	3993	SO3001839C	PIERCE
CORROSION CONTROLLERS INC	3999	SO3004477A	CLARK
NORTH AMERICAN CRANE & EQUIPMENT	3999	SO3004135A	PIERCE

PACIFIC COAST FEATHER CO MARYSVILL	3999	SO3002152C	SNOHOMISH
BEALL TRAILERS OF WA INC 224TH	3999	SO3000610C	KING
BURLINGTON NORTHERN SANTE FE BALMER	4011	SO3001528C	KING
BURLINGTON NORTHERN SANTE FE LGVW	4011	SO3001961C	COWLITZ
BURLINGTON NORTH SANTE FE BLGHM	4011	SO3003655B	WHATCOM
BURLINGTON NORTHERN SANTE FE DELTA	4011	SO3000486C	SNOHOMISH
BURLINGTON NORTH SANTE ROOSEVELT YD	4011	SO3003657B	KLICKITAT
AMTRAK RAILROAD KING ST MAINTENANCE	4011	SO3003235B	KING
COLUMBIA BASIN RAILROAD CO YAKIMA	4011	SO3002642B	YAKIMA
COLUMBIA BASIN RAILROAD WARDEN	4011	SO3002643B	GRANT
BNRR AND SANTE FE BAYSIDE YARD	4011	SO3003720B	SNOHOMISH
BURLINGTON NORTH SANTE FE CENTRALIA	4011	SO3003659B	LEWIS
UNION PACIFIC RAILROAD CO DAWSON ST	4011	SO3001155C	KING
BURLINGTON NORTH SANTE FE SKYKOMISH	4011	SO3003658B	KING
BURLINGTON NORTHERN RAILROAD	4011	SO3001951C	PIERCE
BURLINGTON NORTHERN SANTE FE RR SEA	4011	SO3000484C	KING
COLUMBIA BUSINESS CENTER SWITCH YD	4013	SO3002647B	CLARK
TACOMA RAIL	4013	SO3001318C	PIERCE
UNION PACIFIC RAILROAD CO FIFE	4013	SO3001153C	PIERCE
BEN FRANKLIN TRANSIT	4111	SO3001197C	BENTON
KING COUNTY BELLEVUE OPERATING BASE	4111	SO3003301B	KING
METRO NORTH OPERATING BASE	4111	SO3000418C	KING
METRO SOUTH OPERATING BASE	4111	SO3000417C	KING
THE BUS BARN	4111	SO3001825C	SNOHOMISH
METRO EAST OPERATING BASE	4111	SO3000420C	KING
KITSAP TRANSIT SOUTH BASE	4111	SO3003762B	KITSAP
LAIDLAW TRANSIT SPO	4111	SO3003600B	SPOKANE
KITSAP TRANSIT	4111	SO3004098B	KITSAP
FIRST STUDENT INC STEILACOOM	4111	SO3002329C	KING
LAIDLAW TRANSIT SERVICES #875	4119	SO3002803B	KING
FARWEST TAXI CABS	4121	SO3000403C	KING
INTERCITY TRANSIT	4131	SO3000084C	THURSTON
CLALLAM TRANSIT SYSTEM ADM MTCE OP	4131	SO3001767C	CLALLAM
FIRST STUDENT INC	4151	SO3003077B	PIERCE
LAIDLAW TRANSIT INC SEATTLE	4151	SO3000408C	KING
LAIDLAW TRANSIT INC BATTLE GROUND	4151	SO3000412C	CLARK
WINLOCK SCHOOL DIST BUS TRANSPORT	4151	SO3004456A	LEWIS
LAIDLAW TRANSIT INC VASHON	4151	SO3002251C	KING
LAIDLAW FIRST AVE SEA	4151	SO3002250C	KING
LAIDLAW TRANSIT TENINO	4151	SO3000495C	THURSTON
LAIDLAW TRANSIT INC AKA MAYFLOWER	4151	SO3000413C	PIERCE
COMMUNITY TRANSIT HARDESON RD	4173	SO3003455B	SNOHOMISH
PACIFIC TORQUE INC	4173	SO3003951B	KING
KING COUNTY METRO TRANSIT OPER	4173	SO3004128A	KING
SNOHOMISH CNTY COMMUNITY TRANSIT	4173	SO3000429C	SNOHOMISH
EVERGREEN TRAILS INC	4173	SO3002966B	KING
SOUTH RECYCLE AND DISPOSAL STATION	4212	SO3000737C	KING
ASSOCIATED BOAT TRANSPORT	4212	SO3000293C	KING

USF REDDAWAY INC TACOMA	4212	SO3002885B	PIERCE
WOLFORD RECYCLING FACILITY	4212	SO3004523A	KING
MORGAN TRUCKING INC SHELTON	4212	SO3000415C	MASON
LUDTKE-PACIFIC TRUCKING INC	4212	SO3003163B	WHATCOM
LAYMAN LOGGING TRUCK SHOP	4212	SO3001212C	YAKIMA
USF REDDAWAY INC KENT	4212	SO3002886A	KING
MITCHELL BROS TRUCK LINE INC	4212	SO3004491A	CLARK
WASTE MANAGEMENT NORTHWEST	4212	SO3000573C	KING
HANEY TRUCK LINE INC	4212	SO3003106B	THURSTON
V VAN DYKE INC	4212	SO3000453C	KING
HAROLD LEMAY ENTERPRISES ELMA	4212	SO3000680C	GRAYS HARBOR
SYSTEM TRANSFER OF LONGVIEW INC	4212	SO3000740C	COWLITZ
PAT RABEY TRUCKING INC	4212	SO3000549C	GRAYS HARBOR
VENEER CHIP TRANSPORT	4212	SO3001194C	PIERCE
BYRON BROS INC	4212	SO3000831C	GRAYS HARBOR
RABANCO DBA KENT MERIDIAN DISPOSAL	4212	SO3000427C	KING
CLAUDE B RENFRO	4212	SO3000714C	KITTITAS
SAN JUAN SANITATION CO	4212	SO3004248A	SAN JUAN
WASTE MANAGEMENT OF SEATTLE MARG WY	4212	SO3000581C	KING
TRUCK SHOP INC	4212	SO3004133A	COWLITZ
BECKER TRUCKING INC	4212	SO3000392C	KING
WALSH TRUCKING CO LTD NAPA	4212	SO3004249A	LEWIS
GRESHAM TRANSFER INC	4212	SO3004483A	KING
GARY MCCANN TRUCKING INC	4212	SO3002340C	KING
SHORT HAUL INC	4212	SO3000476C	GRAYS HARBOR
DON LENTUS LOG ROAD CONST CTR	4212	SO3001950C	GRAYS HARBOR
SWEATMAN TRUCK SHOP 1020 SIMPSON	4212	SO3002804B	GRAYS HARBOR
WASTE MGMT W SANITATION HAUL	4212	SO3003988B	SPOKANE
WASTE MGMT VALLEY DISPOSAL HAUL	4212	SO3003987B	SPOKANE
WASTE MANAGEMENT/GREATER WENATCHEE	4212	SO3000576C	CHELAN
DOUG ROGERS TRUCKING INC	4212	SO3001899C	GRAYS HARBOR
WASTE MANAGEMENT RAINIER	4212	SO3002612B	KING
K AND W TRANSPORTATION FED WAY	4212	SO3002283C	KING
WASTE MGMT OLSONS HAULING CO	4212	SO3003989B	STEVENS
HEAVY HAULING CO INC	4212	SO3001867C	COWLITZ
SOLO LEASING 225 INDUST	4212	SO3001854C	COWLITZ
EASTSIDE DISPOSAL + RECYCLING SERV	4212	SO3002760B	KING
SNOHOMISH CO SW RECYCLING + TRANS	4212	SO3001846C	SNOHOMISH
SNOHOMISH CO EVER RECYCLING + TRANS	4212	SO3001847C	SNOHOMISH
GROAT BROS ENGINE SHOP	4212	SO3004062B	COWLITZ
HATHAWAY EXCAVATING CO	4212	SO3001651C	PIERCE
POZZI BROS TRANS INC	4212	SO3000336C	KING
EAGLE RIDGE DEVELOPMENT	4212	SO3003950B	COWLITZ
LEMAY INC	4212	SO3001781C	LEWIS
EVERGONE INC FED WAY	4212	SO3002262C	KING
J L STOREDAHL AND SONS INC	4212	SO3001868C	COWLITZ
OAK HARBOR FREIGHT AUBURN	4212	SO3000734C	KING
M AND M TRANSPORT INC	4212	SO3000697C	LEWIS

OVERNITE TRANSPORTATION CO 9/3/96	4212	SO3002835B	KING
MORGAN TRUCKING INC TACOMA	4212	SO3000303C	PIERCE
ONEILL AND SONS	4212	SO3001404C	THURSTON
WASTE MGMT RST DISP HAUL MAINT	4212	SO3003992B	KING
SHAUGHNESSY HEAVY INDUSTRIES INC	4212	SO3000929C	KING
WASTE MGMT RST DISPOSAL TRANS	4212	SO3003991B	KING
WASTE MGMT SKAGIT CO HAULING	4212	SO3003990B	SKAGIT
WASTE MANAGEMENT SNO KING KIRKLAND	4212	SO3002485C	KING
SAIA MOTOR FREIGHT	4213	SO3000844C	KING
ROADWAY EXPRESS INC T874	4213	SO3003395B	SNOHOMISH
CONSOLIDATED FREIGHTWAYS TAC	4213	SO3001407C	PIERCE
DESTICON TRANSPORTATION INC	4213	SO3002062C	WHATCOM
CON WAY WESTERN EXPRESS UMV	4213	SO3003814B	SKAGIT
ABF FREIGHT SYSTEM KENT	4213	SO3002549B	KING
LYNDEN TRANSPORT INC	4213	SO3001675C	PIERCE
BEKINS NORTHWEST TACOMA	4213	SO3001085C	PIERCE
SWIFT TRANSPORTATION CO INC	4213	SO3000290C	KING
ROADWAY EXPRESS INC T873	4213	SO3003394B	PIERCE
METRO FREIGHT SYSTEMS INC	4213	SO3000968C	PIERCE
WALSH BROS TRUCKING INC	4213	SO3001743C	PIERCE
GROAT BROS INC	4213	SO3000885C	COWLITZ
FOOD EXPRESS INC	4213	SO3001601C	CLARK
SELLAND AUTO TRANSPORT	4213	SO3000650C	KING
GOLDEN STATE FOODS SUMNER	4213	SO3002512B	PIERCE
BROWN LINE INC	4213	SO3000396C	SKAGIT
ROADWAY EXPRESS INC T871	4213	SO3004497A	SPOKANE
ATLAS TRUCKING INC	4213	SO3000395C	CLALLAM
LEE AND EASTES TANK LINES INC	4213	SO3000748C	FRANKLIN
CON WAY WESTERN EXPRESS SEATAC	4213	SO3002452C	KING
CHAS A LASATER CO SEATTLE	4213	SO3002285C	KING
ACTIVE USA INC	4213	SO3002525B	KING
ABF FREIGHT SYSTEM INC TACOMA	4213	SO3000846C	PIERCE
CONSOLIDATED FREIGHTWAYS WVW	4213	SO3001410C	KING
PENINSULA TRUCK LINES AUBURN	4213	SO3003742B	KING
LTI INC LYNDEN	4213	SO3000072C	WHATCOM
INTERSTATE WOOD PRODUCTS INC	4214	SO3001258C	COWLITZ
JAYHAWK ENTER DBA PUGET SOUND TRANS	4214	SO3000695C	CLALLAM
WESTERN VAN 190E	4214	SO3000779C	KING
ALLEN BROWN WOODWASTE INC	4214	SO3001811C	CLARK
FREIGHT SYSTEMS INC	4214	SO3004484A	KING
PRATT MOVING AND STORAGE INC	4214	SO3001527C	WHITMAN
BASIN OIL CO INC DALLAS AVE SEA	4214	SO3002273C	KING
NICHOLS TRUCKING CO INC	4214	SO3000344C	PIERCE
SYSTEM TRANSFER AND STORAGE CO	4214	SO3000430C	KING
RAINIER MOVING SYSTEMS INC	4214	SO3001370C	KING
HANSEN BROS MOVING + STORAGE CO IN	4214	SO3001222C	KING
AIRBORNE EXPRESS CNP	4215	SO3003874B	KING
UNITED PARCEL SERVICE WAEVE	4215	SO3000437C	SNOHOMISH

UNITED PARCEL SERVICE WAYAK	4215	SO3000440C	YAKIMA
UNITED PARCEL SERVICE WAPOR	4215	SO3000447C	CLALLAM
UNITED PARCEL SERVICE WAPUL	4215	SO3000445C	WHITMAN
UNITED PARCEL SERVICE WAKEN	4215	SO3000450C	KING
UNITED PARCEL SERVICE WAKEL	4215	SO3000438C	COWLITZ
UNITED PARCEL SERVICE WAOKA	4215	SO3000449C	OKANOGAN
UNITED PARCEL SERVICE WARED	4215	SO3000446C	KING
UNITED PARCEL SERVICE WASAU	4215	SO3000443C	KING
UNITED PARCEL SERVICE WASEA	4215	SO3000444C	KING
AIRBORNE EXPRESS TAC	4215	SO3003870B	PIERCE
UNITED PARCEL SERVICE WABRE	4215	SO3000435C	KITSAP
UNITED PARCEL SERVICE WAWEN	4215	SO3000441C	CHELAN
UNITED PARCEL SERVICE WABOE	4215	SO3000434C	KING
UNITED PARCEL SERVICE ORVAN	4215	SO3000433C	CLARK
AIRBORNE EXPRESS KIR	4215	SO3003875B	KING
UNITED PARCEL SERVICE WATAC	4215	SO3000309C	PIERCE
UNITED PARCEL SERVICE WAELL	4215	SO3000436C	KITTITAS
UNITED PARCEL SERVICE PACIFIC	4215	SO3004127A	PIERCE
UNITED PARCEL SERVICE WABEL	4215	SO3000439C	WHATCOM
FEDEX GROUND BURLINGTON	4215	SO3003750B	SKAGIT
AIRBORNE EXPRESS SEA	4215	SO3003873B	KING
UNITED PARCEL SERVICE COLVILLE	4215	SO3003251B	STEVENS
LOUIS DREYFUS CORP GRAIN ELEVATOR	4221	SO3002719B	KING
FERNDALE GRAIN INC FERNDALE	4221	SO3000355C	WHATCOM
LSI DBA MINNESOTA CORN PROCESSOR	4221	SO3003091B	PIERCE
HARVEST STATES COOPERATIVES	4221	SO3001774C	COWLITZ
KALAMA EXPORT CO	4221	SO3001816C	COWLITZ
OWL TRANSFER AND STORAGE CO INC	4222	SO3000593C	KING
FOOD SERVICES OF AMERICA	4222	SO3002006C	KING
COLUMBIA COLSTOR WENATCHEE	4222	SO3003769B	CHELAN
SCS INDUSTRIES	4222	SO3002032C	KING
RAINIER COLD STORAGE	4222	SO3001507C	KING
CITYICE COLD STORAGE	4222	SO3001488C	KING
SUPER VALU WEST COAST GROC AUBURN	4222	SO3002001C	KING
KENYON ZERO STORAGE INC	4222	SO3001223C	YAKIMA
BELLINGHAM COLD STORAGE CO ORCHARD	4222	SO3000597C	WHATCOM
AMERICOLD CORP BURLINGTON	4222	SO3000591C	SKAGIT
TRIDENT SEAFOODS CORP PIER 91	4222	SO3001526C	KING
BELLINGHAM COLD STORAGE CO ROEDER A	4222	SO3000596C	WHATCOM
NORTHWEST CONTAINER SERVICES INC	4225	SO3003779B	KING
STAR MOVING SYSTEMS	4225	SO3000611C	PIERCE
CARRS SAFEWAY INC	4225	SO3004243A	PIERCE
URBAN ACCESSORIES	4225	SO3004493A	KING
L AND L NURSERY SUPPLY	4225	SO3001709C	PIERCE
MICHELSEN PACKAGING WEN	4225	SO3000810C	CHELAN
MACMILLAN PIPER MASS SHOP	4225	SO3003252B	KING
WARDS COVE PACKING CO 303	4225	SO3001246C	KING
PEELL HULK HAULING	4225	SO3000944C	GRAYS HARBOR

PACIFIC NORTHWEST TERMINALS INC	4225	SO3001424C	PIERCE
NAPAVINE RELOAD YARD	4225	SO3003490B	LEWIS
GARY MERLINO CONSTRUCTION OFFICE BD	4225	SO3003120B	KING
CITY BEVERAGES LLC	4225	SO3001968C	KING
WARDS COVE PACKING CO 88	4225	SO3001247C	KING
UNITED RENTALS BRANCH 056	4225	SO3004103B	CLALLAM
NW PIPELINE CORP GH CONST YARD	4225	SO3001463C	GRAYS HARBOR
SEAPAC SERVICE COMPANY	4225	SO3003983B	KING
SCS SUPPLY CHAIN SOLUTIONS	4225	SO3004467A	PIERCE
WESTWAY FEED PRODUCTS	4226	SO3003484B	WALLA WALLA
ANDERSON AND MIDDLETON LUMBER CO	4226	SO3000391C	GRAYS HARBOR
KIA FACILITY	4226	SO3000489C	PIERCE
ST SERVICES	4226	SO3002510B	CLARK
MAZDA CAR WASH FACILITY	4226	SO3000488C	PIERCE
MMSA CAR WASH FACILITY TNT AUTO	4226	SO3000490C	PIERCE
PUGET SOUND TRUCK LINES INC EVER	4231	SO3000945C	SNOHOMISH
VIKING FREIGHT INC	4231	SO3004492A	KING
PUGET SOUND TRUCK LINES INC TAC	4231	SO3000948C	PIERCE
PUGET SOUND TRUCK LINES INC LGVW	4231	SO3000950C	COWLITZ
RUAN LEASING CO	4231	SO3000426C	KING
PUGET SOUND TRUCK LINES INC ABER	4231	SO3000947C	GRAYS HARBOR
PUGET SOUND TRUCK LINES INC SEA	4231	SO3000949C	KING
QUALITY CARRIERS, INC	4231	SO3000411C	KING
PUGET SOUND TRUCK LINES INC BLHM	4231	SO3000952C	WHATCOM
DI PIETRO TRUCKING CO	4231	SO3001969C	KING
TRUCK RAIL HANDLING INC	4231	SO3002841B	PIERCE
PUGET SOUND TRUCK LINES INC KET FLS	4231	SO3000951C	STEVENS
QUIGG BROS INC	4412	SO3003948B	GRAYS HARBOR
TRANS PACIFIC CONTAINER TERMINAL 30	4412	SO3000469C	KING
TERMINAL 37	4412	SO3000470B	KING
COASTAL TRANSPORTATION INC	4424	SO3000400C	KING
SSA TERMINALS LLC	4424	SO3000468C	KING
TOTEM OCEAN TRLR EXP TOTE ALASKA TE	4424	SO3001151C	PIERCE
HANJIN SHIPPING CO TERMINAL 46	4424	SO3000465C	KING
NORTHLAND SERVICES 8TH AVE TERMINAL	4424	SO3003646B	KING
NORTHLAND SERVICES	4424	SO3000962C	KING
PORT OF TACOMA PARCELS 16 24 27	4449	SO3003627B	PIERCE
ALASKA MARINE LINES SEATTLE TERMINA	4449	SO3001365C	KING
TRIDENT SEAFOODS CORP TACOMA VESSEL	4449	SO3002508B	PIERCE
TIDEWATER BARGE LINES INC	4449	SO3000431C	CLARK
MAERSK PACIFIC LTD LINCOLN AVE	4491	SO3000307C	PIERCE
TRIDENT SEAFOODS CORP YARD SEA	4491	SO3000924C	KING
BLAKELY ISLAND FORESTRY LOG DUMP	4491	SO3004002B	SAN JUAN
EAGLE MARINE SERVICES LTD TERM 5	4491	SO3000464C	KING
TIDEWATER TERM COLUMBIA RVR CTNR YD	4491	SO3000743C	BENTON
PT OF GRAYS HARBOR EQUIP MAINT COMP	4491	SO3000892C	GRAYS HARBOR
PORT OF VANCOUVER 3103 IND SITE	4491	SO3000424C	CLARK
STEVEDORING SERVICES OF AMERICA	4491	SO3001245C	PIERCE

METROPOLITAN STEVEDORE CO P2 ANAC	4491	SO3003430B	SKAGIT
WASHINGTON UNITED TERMINALS	4491	SO3003491B	PIERCE
UNITED GRAIN CORP	4491	SO3000432C	CLARK
HUSKY TERMINAL + STEVEDORING INC	4491	SO3000646C	PIERCE
STEVEDORING SERVICES TERMINAL 18	4491	SO3000467C	KING
MARINE TERMINALS CORP	4491	SO3000410C	CLARK
PORT OF PT ANGELES MARINE TERMINAL	4491	SO3000337C	CLALLAM
SOUTH TERMINAL/PIER 1/HEWITT TERM	4491	SO3001207C	SNOHOMISH
ANACORTES LOG + BULK STEVEDORE CO	4491	SO3000849C	SKAGIT
EVERGREEN AMERICA TERMINAL 4	4491	SO3004486A	PIERCE
PORT OF KALAMA NORTH PORT MARINE T	4491	SO3003045B	COWLITZ
PORT OF SEATTLE MARINE MAINT SHOP	4491	SO3002517B	KING
PORT OF BELLINGHAM MAINT SHOP 619	4491	SO3001498C	WHATCOM
DUNLAP TOWING CO EVERETT FEDERAL AV	4492	SO3000634C	SNOHOMISH
CROWLEY MARINE SERVICES PIER 17	4492	SO3000954C	KING
ISLAND TUG AND BARGE TERMINAL 7C	4492	SO3004509A	KING
DUNLAP TOWING CO LA CONNER	4492	SO3000635C	SKAGIT
PORT OF SEATTLE MARITIME INDUSTRIAL	4493	SO3003236B	KING
FRIDAY HARBOR MARINA	4493	SO3001540C	SAN JUAN
WESTERN PIONEER	4499	SO3000455C	KING
WDOT KINGSTON TERMINAL	4499	SO3001069C	KITSAP
PORT OF LONGVIEW	4499	SO3001242C	COWLITZ
WDOT COLMAN DOCK TERMAL + PIER 46	4499	SO3001065C	KING
INTERNATIONAL TERMINAL CO	4499	SO3004535A	KING
PORT OF BELLINGHAM BCT	4499	SO3001072C	WHATCOM
WDOT EDMONDS TERMINAL	4499	SO3001067C	SNOHOMISH
WDOT PORT TOWNSEND TERMINAL	4499	SO3001071C	JEFFERSON
MUKILTEO TERMINAL WDOT	4499	SO3001070C	SNOHOMISH
WDOT FAUNTLEROY TERMINAL	4499	SO3001068C	KING
WDOT BREMERTON TERMINAL	4499	SO3001064C	KITSAP
WDOT ANACORTES TERMINAL	4499	SO3001063C	SKAGIT
ALASKA AIRLINES	4512	SO3004487A	SPOKANE
DELTA PASCO TRICITIES AIRPORT	4512	SO3004358A	FRANKLIN
HORIZON AIR YAKIMA AIR TERMINAL	4512	SO3000978C	YAKIMA
HORIZON AIR PULLMAN MOSCOW AIRPORT	4512	SO3000979C	WHITMAN
PANGBORN MEMORIAL AIRPORT	4512	SO3000980C	CHELAN
HORIZON AIR GRANT COUNTY AIRPORT	4512	SO3000886C	GRANT
NORTHWEST AIRLINES INC	4512	SO3004494A	SPOKANE
KENMORE AIR HARBOR	4512	SO3003675B	KING
PRO FLIGHT AVIATION INC RENTON	4512	SO3002266C	KING
SOUTHWEST AIRLINES CO - GEG	4512	SO3004496A	SPOKANE
KENMORE AIR HARBOR INC	4512	SO3001124C	KING
DELTA AIRLINES SPOKANE AIRPORT	4512	SO3004495A	SPOKANE
NORTHWEST SEAPLANES INC RENTON	4512	SO3002191C	KING
UNITED PARCEL SERVICE INC	4513	SO3004488A	SPOKANE
FEDERAL EXPRESS PWT STATION	4513	SO3003367B	KITSAP
AMERIFLIGHT INC HANGAR 5	4513	SO3002830B	KING
FEDERAL EXPRESS TCM TAC	4513	SO3003366B	PIERCE

FEDERAL EXPRESS PAE BOTHELL	4513	SO3001430C	SNOHOMISH
FEDERAL EXPRESS SEA	4513	SO3001432C	KING
FEDERAL EXPRESS ODW BURLINGTON	4513	SO3003364B	SKAGIT
ABX AIR AIRBORNE EXPRESS GEG	4513	SO3004474A	SPOKANE
FEDERAL EXPRESS CORP-GEGR	4513	SO3004541A	SPOKANE
INTER STATE AVIATION INC	4522	SO3000975C	WHITMAN
FRIDAY HARBOR AIRPORT	4522	SO3001541C	SAN JUAN
WALLA WALLA REGIONAL AIRPORT	4581	SO3000425C	WALLA WALLA
AERO COPTERS INC	4581	SO3000311C	KING
WA DOT AVIATION DIVISION SEATTLE	4581	SO3002247C	KING
ARLINGTON MUNICIPAL AIRPORT	4581	SO3001513C	SNOHOMISH
AVIATION FUEL STORAGE	4581	SO3000345C	KING
ACTION AVIATION INC	4581	SO3000479C	KING
BREMERTON NATIONAL AIRPORT + OVIP	4581	SO3000901C	KITSAP
KING COUNTY INT AIRPORT MAINT SHOP	4581	SO3000343C	KING
AUBURN MUNICIPAL AIRPORT	4581	SO3000399C	KING
LYNDEN MUNICIPAL AIRPORT	4581	SO3001202C	WHATCOM
BELLINGHAM INTERNATIONAL AIRPORT	4581	SO3000985C	WHATCOM
HORIZON AIR INDUSTRIES WALLA WALLA	4581	SO3000977C	WALLA WALLA
TRI CITIES AIRPORT	4581	SO3000710C	FRANKLIN
ANACORTES AIRPORT PT OF ANAC	4581	SO3003975B	SKAGIT
PULLMAN MOSCOW REGIONAL AIRPORT	4581	SO3000942C	WHITMAN
WEYERHAEUSER AVIATION	4581	SO3000456C	LEWIS
JEFFERSON CO INTERNATIONAL AIRPORT	4581	SO3000725C	JEFFERSON
SNOHOMISH COUNTY AIRPORT	4581	SO3000428C	SNOHOMISH
SPOKANE INTERNATIONAL AIRPORT	4581	SO3004373A	SPOKANE
WM R FAIRCHILD INT'L AIRPORT	4581	SO3000083C	CLALLAM
CROSSINGS AVIATION	4581	SO3000606C	PIERCE
SKAGIT REGIONAL/BAYVIEW AIRPORT	4581	SO3000931C	SKAGIT
SPOKANE AIRWAYS	4581	SO3004460A	SPOKANE
GALVIN FLYING SERVICE INC	4581	SO3000607C	KING
TACOMA TRANSLOAD INC	4731	SO3003419B	PIERCE
NATIONAL GUARD OMS 5	4785	SO3003845B	KING
NATIONAL GUARD OMS 6	4785	SO3003846B	KING
NATIONAL GUARD AVIA FAC 1 BLD 3106	4785	SO3003844B	PIERCE
NATIONAL GUARD MATES BLDG 951	4785	SO3003847B	YAKIMA
NATIONAL GUARD OMS 9	4785	SO3003842B	SPOKANE
NATIONAL GUARD UTES FACILITY	4785	SO3003931B	PIERCE
NATIONAL GUARD OMS 4	4785	SO3003843B	LEWIS
TACOMA STEAM PLANT CITY OF TACOMA	4911	SO3001319C	PIERCE
WA STATE UNIVERSITY POWER PLANT	4911	SO3001115C	WHITMAN
EVERETT DELTA POWER PROJECT NWPOWER	4911	SO3003470B	SNOHOMISH
TOLT TREATMENT FACILITIES	4941	SO3004126A	KING
REDONDO TREATMENT PLANT	4952	SO3000751C	KING
CENTRAL KITSAP TREATMENT FACILITY	4952	SO3000729C	KITSAP
ADVANCED WASTEWATER TREATMENT PLANT	4952	SO3001123C	SPOKANE
SALMON CREEK WASTEWATER TRTMT PLANT	4952	SO3000728C	CLARK
LAKEHAVEN UTILITY DISTRICT	4952	SO3000750C	KING

LOTT WASTEWATER TREATMENT PLANT	4952	SO3000749C	THURSTON
DES MOINES CREEK TREATMENT PLANT	4952	SO3002353C	KING
CHAMBERS CREEK WWTP	4952	SO3000727C	PIERCE
CASTLE ROCK WWTP	4952	SO3004047B	COWLITZ
TACOMA NORTH END WASTEWATER PLANT	4952	SO3000712C	PIERCE
KING COUNTY SOUTH TREATMENT PLANT	4952	SO3002511B	KING
TACOMA CENTRAL WASTEWATER PLANT	4952	SO3000711C	PIERCE
HOUGHTON LANDFILL	4953	SO3001266C	KING
DUVALL LANDFILL	4953	SO3001268C	KING
RAINBOW VALLEY LANDFILL INC	4953	SO3001306C	PACIFIC
LYNNWOOD DISPOSAL SERVICES	4953	SO3002339C	SNOHOMISH
COWLITZ COUNTY SANITARY LANDFILL	4953	SO3000754C	COWLITZ
WEYERHAEUSER COMPANY HEADQUARTERS	4953	SO3001254C	COWLITZ
ROOSEVELT REGIONAL LANDFILL	4953	SO3000939C	KLICKITAT
RAYONIER INC MT PLEASANT LANDFILL	4953	SO3000406C	CLALLAM
RECOMP OF WA	4953	SO3001078C	WHATCOM
AMFAB SITE	4953	SO3000315C	WHATCOM
COUNTY CONSTRUCTION RECYCLERS	4953	SO3000356C	WHATCOM
CEDAR HILLS LANDFILL	4953	SO3000756C	KING
VASHON ISLAND LANDFILL	4953	SO3000755C	KING
OLYMPIC VIEW SANITARY LANDFILL	4953	SO3002538B	KITSAP
WHATCOM COUNTY CEDARVILLE LANDFILL	4953	SO3001280C	WHATCOM
TACOMA SOLID WASTE UTIL DV PW DEPT	4953	SO3001201C	PIERCE
SNOHOMISH CO CATHCART LANDFILL	4953	SO3001273C	SNOHOMISH
LAND RECOVERY LANDFILL INDUST	4953	SO3002557B	PIERCE
PHILIP SERVICES CORP WASHOUGAL	4953	SO3003079B	CLARK
SAFETY KLEEN LYNNWOOD	4953	SO3001216C	SNOHOMISH
CEDAR FALLS LANDFILL	4953	SO3001267C	KING
HAROLD LEMAY ENT MAINT SHOP	4953	SO3004085B	GRAYS HARBOR
VOPAK USA INC	4953	SO3000707C	KING
GRAYS HARBOR CENTRAL TRANSFER	4953	SO3004084B	GRAYS HARBOR
PUYALLUP/KIT CORNER LANDFILL	4953	SO3001269C	KING
SOL PRO INC	4953	SO3001234C	PIERCE
WEST VAN MATERIALS RECOVERY CTR	4953	SO3004051B	CLARK
SAFETY KLEEN CORP AUBURN	4953	SO3001217C	KING
WALLA WALLA SUDBURY LANDFILL	4953	SO3001198C	WALLA WALLA
STAFFORD CREEK LANDFILL	4953	SO3000735C	GRAYS HARBOR
LAWSON LANDFILL	4953	SO3001008C	CLALLAM
LEHIGH PORTLAND CEMENT KILN DUST PI	4953	SO3002192C	PEND OREILLE
ABERDEEN SANITARY LANDFILL	4953	SO3000733C	GRAYS HARBOR
HILLTOP WOODWASTE LANDFILL	4953	SO3000114C	WHATCOM
SAFETY KLEEN SPOKANE	4953	SO3001218C	SPOKANE
WESTERN AVENUE STEAM PLANT	4961	SO3000550C	KING
CONRAD INDUSTRIES	5014	SO3001215C	LEWIS
BRYS AUTO WRECKING	5015	SO3004525A	KING
U FIX IT HONDA AUTO WRECKING	5015	SO3000783C	KING
QUIL CEDA AUTO WRECKING	5015	SO3001088C	SNOHOMISH
HWY 3 AUTO WRECKING	5015	SO3000657C	MASON

FERRILLS AUTO PARTS EVERETT	5015	SO3000689C	SNOHOMISH
CASCADE AUTO WRECKING INC	5015	SO3000002C	KING
FOUCH EQUIPMENT INC	5015	SO3000288C	COWLITZ
SOUTH END AUTO WRECKING INC RENTON	5015	SO3000021C	KING
SOUTH END AUTO WRECKING INC AUBURN	5015	SO3000019C	KING
FERRILLS AUTO PARTS LYNNWOOD	5015	SO3000690C	SNOHOMISH
IMPORT AUTO WRECKER INC	5015	SO3000817C	SNOHOMISH
ABERDEEN AUTO WRECKING	5015	SO3002081C	GRAYS HARBOR
SINGLETON'S RV SALVAGE AND SALES	5015	SO3000759C	LEWIS
FITZ AUTO PARTS INC WOODINVILLE	5015	SO3000007C	KING
NORTHERN EUROPEAN AUTO RECYCLERS	5015	SO3000806C	KING
WILD WEST MUSTANG RANCH	5015	SO3000778C	SNOHOMISH
RON'S AUTO WRECKING	5015	SO3000016C	KITSAP
TERRY'S SALVAGE	5015	SO3000616C	COWLITZ
ARTS AUTO WRECKING	5015	SO3000602C	SKAGIT
KITSAP AUTO WRECKING INC	5015	SO3000477C	KITSAP
AURORA AUTO WRECKING SEA	5015	SO3002789B	KING
ALPINE AUTO INC	5015	SO3003282B	CLALLAM
SIDELINE AUTO WRECKING INC	5015	SO3000333C	GRAYS HARBOR
PEARSON METAL SALVAGE INC	5015	SO3000956C	PIERCE
BALLARD AUTO WRECKING	5015	SO3000903C	KING
AIRPORT AUTO WRECKING TOO	5015	SO3002158C	KITSAP
LYNNWOOD AUTO WRECKERS INC	5015	SO3000814C	SNOHOMISH
ALL WEST AUTO WRECKING	5015	SO3003969B	MASON
LARRY'S AUTO AND TRUCK PARTS INC	5015	SO3000816C	SKAGIT
NIX AUTO RECYCLING	5015	SO3000807C	SNOHOMISH
GARRAWAYS AUTO PARTS INC	5015	SO3000824C	PIERCE
AL'S LYNNWOOD TRUCK PARTS	5015	SO3000840C	SNOHOMISH
MERIDIAN AUTO WRECKING	5015	SO3000812C	PIERCE
A AND AUTO WRECKERS	5015	SO3002956B	KITTITAS
LONGVIEW AUTO WRECKING	5015	SO3004548A	COWLITZ
EASTSIDE AUTO WRECKING INC	5015	SO3001086C	KITSAP
BUILDING BUSTERS INC	5015	SO3002153C	KING
ALL USED AUTO PARTS AT WOODYS INC	5015	SO3000841C	SNOHOMISH
FRIENDLY AUTO SALVAGE	5015	SO3001452C	GRAYS HARBOR
OAK HARBOR AUTO WRECKING 16TH AVE	5015	SO3004320A	ISLAND
FLEET SUBMARINE RECYCLING	5015	SO3000889C	PACIFIC
CLASSIC CARS LTD DBA I 5 AUTO PARTS	5015	SO3002124C	LEWIS
BEST AUTO PARTS INC	5015	SO3000741C	SNOHOMISH
AL'S SALVAGE	5015	SO3000857C	WHATCOM
KEN SIMPSON'S USED PARTS INC	5015	SO3001501C	CLALLAM
NOB HILL AUTO WRECKING INC	5015	SO3000698C	YAKIMA
ALLEN AUTO PARTS	5015	SO3000287C	THURSTON
NIX AUTO WRECKING INC	5015	SO3000745C	KING
BLACK DIAMOND AUTO WRECKING 1100	5015	SO3004125A	KING
NORTHWEST AUTO + TRUCK WRECKING INC	5015	SO3000961C	KING
ROBERT'S REPAIR	5015	SO3001519C	LEWIS
WHOLESALE AUTO	5015	SO3001496C	WHATCOM

FOSTER AUTO PARTS DBA U PULL IT	5015	SO3003752B	CLARK
ALMAC TOWING INC	5015	SO3001503C	SKAGIT
ALSETH AUTO PARTS	5015	SO3000842C	SNOHOMISH
SUMMIT PARK AUTO WRECKING	5015	SO3000786C	SKAGIT
AFFORDABLE AUTO WRECKING	5015	SO3000843C	KING
WALT AND VERN'S INC	5015	SO3000026C	PIERCE
CHRISTIAN'S ARCO TOWING + RECYCLING	5015	SO3001502C	ISLAND
FLEURY AUTO + TRUCK PARTS EVERETT	5015	SO3002260C	SNOHOMISH
ROOF TRUSS SUPPLY INC	5031	SO3002038C	SNOHOMISH
EAST TEAK TRADING GROUP INC	5031	SO3004362A	SNOHOMISH
SKAGIT RIVER STEEL + RECYCLING BURL	5051	SO3002085C	SKAGIT
NICHOLSON ENGINEERING CO E D ST	5072	SO3001682C	PIERCE
S AND S BARGE	5093	SO3001691C	PIERCE
LAKES AUTO WRECKING	5093	SO3001142C	PIERCE
ROGNLIN'S CONC + ASPHALT RECYC ABER	5093	SO3002714B	GRAYS HARBOR
SEATTLE IRON + METALS CORP	5093	SO3003645B	KING
LAKEVIEW AUTO WRECKING	5093	SO3001083C	PIERCE
TACOMA RECYCLING CO INC	5093	SO3001852C	PIERCE
EMERALD FIBERS INC	5093	SO3001674C	PIERCE
NAVY CITY METALS	5093	SO3001443C	KITSAP
TACOMA METALS INC	5093	SO3000682C	PIERCE
SWANSON BARK & WOOD PROD LGVW	5093	SO3004071B	COWLITZ
N W RECYCLING	5093	SO3001461C	WHATCOM
ROGNLINS CONCRETE + ASPHALT RECY HO	5093	SO3002752B	GRAYS HARBOR
UNOCAL EDMONDS TERMINAL	5093	SO3002953B	SNOHOMISH
ACE SEATTLE CORP	5093	SO3001490C	SNOHOMISH
FIBRES INTERNATIONAL INC BELLEVUE	5093	SO3003599B	KING
NEW WEST GYPSUM USA INC	5093	SO3001333C	PIERCE
RUBBER GRANULATORS AND EQUIPMENT	5093	SO3000937C	SNOHOMISH
ARROW METALS CORPORATION	5093	SO3000001C	SNOHOMISH
ALL METAL CO	5093	SO3000647C	KING
FIBRES INTERNATIONAL INC 4TH AV	5093	SO3003598B	KING
GUNDIES INC BLHM	5093	SO3004242A	WHATCOM
PETRICH AUTO WRECKING	5093	SO3002939B	PACIFIC
METALS WEST	5093	SO3000969C	KING
VERBEEK WRECKING	5093	SO3000025C	SNOHOMISH
MCCLARY COLUMBIA	5093	SO3004450A	PIERCE
HYLEBOS MARINA STORAGE YARD	5093	SO3002356C	PIERCE
WASTE MANAGEMENT SEA RECYCLE AM	5093	SO3000582C	KING
PACIFIC COAST SHREDDING	5093	SO3003401B	CLARK
KB AUTO WRECKING	5093	SO3004452A	CLALLAM
REGIONAL DISPOSAL BLACK RIVER TRANS	5093	SO3002149C	KING
RAYMOND, CITY OF WWTF	5093	SO3004504A	PACIFIC
HENIFIN CONSTRUCTION LLC	5093	SO3002167C	WHATCOM
BUTCHERS SCRAP METAL	5093	SO3001957C	GRAYS HARBOR
AMERICAN ROOFING RECYCLERS LLC	5093	SO3003411B	SNOHOMISH
WASTE MANAGEMENT NW PT ANGELES	5093	SO3002519B	CLALLAM
IKAN AUTO WRECKING	5093	SO3003286B	GRAYS HARBOR

BIRMINGHAM STEEL TERMINAL 105 PORT	5093	SO3002341C	KING
WASTE MANAGEMENT NORTHWEST WOODINVL	5093	SO3000574C	KING
WASTE CONTROL CONCRETE RECYCLIN	5093	SO3003894B	COWLITZ
RECYCLING + DISPOSAL SERVICES INC	5093	SO3002311C	WHATCOM
RECYCLING DEPOT INC	5093	SO3000015C	KING
TOMMYS SCRAP AND SALVAGE PASCO	5093	SO3002320C	FRANKLIN
MIDLAND AUTO WRECKING	5093	SO3000010C	PIERCE
JOSEPH SIMON AND SONS	5093	SO3000018C	PIERCE
TRANSFORMER TECHNOLOGIES LLC	5093	SO3002271C	SPOKANE
RODEO CITY RECYCLING AND SALVAGE	5093	SO3000958C	KITTITAS
MURREY'S OLYMPIC DISPOSAL	5093	SO3003154B	CLALLAM
JEF RECYCLING	5093	SO3004024B	KING
BOEING KENT BENAROYA	5093	SO3001117C	KING
Z RECYCLERS INC	5093	SO3002139C	WHATCOM
JEFFERSON SMURFIT CORP RENTON	5093	SO3002558B	KING
WEYERHAEUSER PAPER CO RECYCLING DV	5093	SO3004422A	KING
J AND J SALVAGE AND WRECKING	5093	SO3003826B	THURSTON
BUFFALO INDUSTRIES	5093	SO3000621C	KING
PACIFIC DISPOSAL LEMAY TUMWATER	5093	SO3002133C	THURSTON
WASTE CONTROL RECYCLING	5093	SO3000918C	COWLITZ
SAFETY KLEEN FIRST RECOVERY	5093	SO3001161C	SKAGIT
SAFEWAY WAREHOUSE INC BELLEVUE	5141	SO3002354C	KING
ASSOCIATED GROCERS KENT	5141	SO3002043C	KING
ASSOCIATED GROCERS 3301 NORFOLK	5141	SO3002040C	KING
TWIN CITY SALE	5154	SO3003985B	LEWIS
CHEMCENTRAL CORP SEATTLE	5169	SO3001815C	KING
SHULTZ DISTRIBUTING INC SEA	5171	SO3002346C	KING
UNDERWOOD OIL	5171	SO3000744C	YAKIMA
TIDEWATER TERMINAL CO CLARKSTON	5171	SO3000716C	WHITMAN
LAUREL STATION	5171	SO3001522C	WHATCOM
COOPER OIL INC	5171	SO3001257C	COWLITZ
MOUNTAIN OIL INC	5171	SO3000011C	WALLA WALLA
PETTIT OIL CO	5171	SO3001870C	GRAYS HARBOR
JAMES OIL COMPANY	5171	SO3001889C	KING
SKAGIT PETROLEUM	5171	SO3000702C	SKAGIT
POWELL CHRISTENSEN INC	5171	SO3000335C	YAKIMA
WILKINS DISTRIBUTING CO GULL IND	5171	SO3000372C	KITSAP
RAINIER PETROLEUM P 15	5171	SO3002721B	KING
TIDEWATER TERMINAL CO PASCO	5171	SO3000023C	FRANKLIN
ASSOCIATED PETROLEUM PRODUCTS	5171	SO3003949B	KING
BALLARD OIL CO INC	5171	SO3002922B	KING
DAN HULL DIST INC	5171	SO3001818C	LEWIS
OVERLAKE OIL INC KIRKLAND	5171	SO3002259C	KING
ASSOCIATED PETROLEUM PRODUCTS	5172	SO3004245A	PIERCE
LOUWS TRUSS INC	5211	SO3002119C	WHATCOM
TOPSOILS INC	5261	SO3003265B	SNOHOMISH
BUILDERS SUPPLY INC	5261	SO3002118C	KING
AMERICAN LANDSCAPE MAINTENANCE	5261	SO3004083B	COWLITZ

EMERY ENTERPRISES	5511	SO3001931C	GRAYS HARBOR
INSURANCE AUTO AUCTIONS	7389	SO3004522A	KING
ACTIVE DIESEL REPAIR	7699	SO3004061B	COWLITZ
CHECK RIDE WOODINVILLE	8249	SO3002055C	KING
PACCAR TECHNICAL CENTER	8734	SO3002016C	SKAGIT

APPENDIX E—MIXING ZONE REQUEST

The current application for coverage/modification form will be modified to include the request for a mixing zone. All new facilities and any facility requesting an expanded mixing zone must complete part "C" of the Receiving Water Information.

III. Receiving Water Information (check all that apply)

A. Where Does Stormwater From Your Facility Discharge to:

1. ❑ Storm drain system - Owner of storm drain system (name) _____
2. ❑ Indirectly or directly to surface waters (e.g., river, lake, creek, estuary, ocean, wetland)
3. ❑ Directly to ground waters of Washington state: ❑ Dry Well ❑ Drainfield ❑ Other
4. ❑ Sanitary/combined sewer system

B. Name(s) of Receiving Water(s):_____

Initial discharge is to an unnamed receiving water? ❑ Yes ❑ No

C. Request for Mixing Zone

1. ❑ I am requesting a standard mixing zone as authorized in the industrial stormwater general permit, applicability and size defined in Special Condition S3.E. In requesting this mixing zone I certify that I have implemented all known, available, and reasonable methods of treatment (AKART) and am managing stormwater discharges to protect the beneficial uses of the receiving water.

2. ❑ I am requesting an expanded mixing zone as authorized under WAC 173-201A-100(10) and consistent with the applicability provisions in the industrial stormwater general permit, Special Condition S3.E. In requesting this mixing zone I certify that I have implemented all known, available, and reasonable methods of treatment (AKART), the proposed mixing zone will not interfere with the beneficial uses of the receiving water, and will not create a barrier to the migration or translocation of indigenous organisms to a degree that might cause damage to the ecosystem. In support of this I am including the following documentation:

    a) A map clearly identifying all waters included in the expanded mixing zone,
    b) All known discharges within the expanded mixing zone, their location and the source of the discharge,
    c) A description of the historic and current uses of all waters included in the expanded mixing zone including the typical plant and animal species inhabiting the waters and public uses of the waters, and
    d) Characterization of the stormwater discharge consistent with the EPA Form 3510-2F (Form 2F).

APPENDIX F—RECEIVING WATERBODY FORM

Part A – Facility Identification:

Permit Number: SO3-0 0 _ _ _ _

Facility Name: _____

Part B – Site Map: (attach)

1. Drainage and discharge structures (name each discharge point).
2. An outline of the stormwater drainage areas for each stormwater discharge point.
3. Areas where stormwater discharges to the ground.
4. Paved areas.
5. All buildings.
6. Areas of pollutant contact (actual or potential).
7. Surface water locations (include wetlands, drainage ditches, and sloughs).
8. Areas of existing and potential soil erosion.
9. Vehicle service areas.

Part C – Discharge Information: (provide the following information for each discharge point named in Part B, 1. Attach additional sheets as necessary)

1. Discharge Identifier: this is the name, number, letter, or symbol used on the map to identify the point of discharge

   _____

2. Latitude/Longitude Point of Discharge: this is the geographical location of the point where stormwater is discharged from your facility expressed in latitude/longitude

   Latitude: ____ ° ____ ‘ ____ “ Longitude: ____ ° ____ ‘ ____ “

3. Conveyance System: if you discharge to a municipal stormwater system or other stormwater conveyance system (e.g. roadside ditch), identify the system

   _____

4. Latitude/Longitude Receiving Water: this is the geographical location of the point where discharge from your facility enters a receiving water. It can be the same as “2.” above

   Latitude: ____ ° ____ ‘ ____ “ Longitude: ____ ° ____ ‘ ____ “

5. Name of Receiving Water: this is the name of the receiving waterbody located in “4.” above

   _____

Part D – Signature:

_____	_____	_____
Operator/Representative’s Printed Name	Operator/Representative’s Signature	Date

APPENDIX G—"NO EXPOSURE" FORM

This is the information required to apply for a Certificate of No Exposure. The actual form will be available on the Internet for completion and electronic submission. Facilities that receive a Certificate of No Exposure are not required to apply for permit coverage under the Industrial Stormwater General Permit. An industrial facility qualifies for a Certificate of No Exposure when all industrial materials and activities are protected from contact with stormwater. With two exceptions, a storm resistant shelter is the minimum level of protection required to prevent rain, snow, snowmelt, and/or runoff from coming in contact with industrial materials and activities. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

1. adequately maintained vehicles used in material handling; and
2. final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

Similar to coverage under a permit, a Certificate of No Exposure is for a specific location and is not transferable to a new location or to other facilities. In addition, the exclusion from NPDES permitting is available on a facility-wide basis only, not for individual stormwater outfalls. If any industrial activities or materials will be exposed to precipitation, the facility is not eligible for the no exposure exclusion.

By signing and submitting this application for Certificate of No Exposure, the applicant certifies that a condition of no exposure exists at its facility or site, and must comply with the terms and conditions of Special Condition S6 of the Industrial Stormwater General Permit. This includes the responsibility of the applicant to reapply every 5 years, the requirement to apply for coverage if conditions change and no exposure no longer applies, and the right of Ecology to inspect the facility.

A. Facility Operator Information

1. Name: _____ 2. Phone: _____

3. Mailing Address: _____

_____

City: _____ State: _____ Zip Code: _____

B. Facility/Site Location Information

1. Facility Name: _____

2. Contact Person: _____ Contact Phone: _____

3. Location: _____

Street Address _____

or description _____

City: _____ County: _____ Zip Code: _____

4. Geographical Location

Latitude: ____° _____' _____" Longitude: _____° _____' _____"

5. Was the facility or site previously covered under an NPDES storm water permit? ☐ Yes ☐ No

If yes, enter NPDES permit number: _____

6. Primary Standard Industrial Code: _____

7. Total size of site associated with industrial activity: _____ acres

8. Have you paved or roofed over a formerly exposed, pervious area in order to qualify for the no exposure exclusion? ☐ Yes ☐ No

If yes, please indicate approximately how much area was paved or roofed over.*

☐ Less than one acre ☐ One to five acres ☐ More than five acres

*Note: Completing this question does not disqualify you for the no exposure exclusion. However, your permitting authority may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

9. Stormwater from your facility discharges to? (check all that apply)

☐ Storm drain system – Name/owner of storm drain system _____

☐ Indirectly or directly to surface water

☐ River ☐ Lake ☐ Creek ☐ Estuary ☐ Ocean ☐ Wetland

Name(s) of Receiving Water(s): _____

C. Exposure Checklist (Yes or No)

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future?

Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water	☐ Yes ☐ No
Materials or residuals on the ground or in storm water inlets from spills/leaks	☐ Yes ☐ No
Materials or products from past industrial activity	☐ Yes ☐ No
Material handling equipment (except adequately maintained vehicles)	☐ Yes ☐ No
Materials or products during loading/unloading or transporting activities	☐ Yes ☐ No
Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result	☐ Yes ☐ No

in the discharge of pollutants)	
Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	☐ Yes ☐ No
Materials or products handled/stored on roads or railways owned or maintained by the discharger	☐ Yes ☐ No
Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	☐ Yes ☐ No
Application of or disposal of process wastewater	☐ Yes ☐ No
Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow	☐ Yes ☐ No

D. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from the industrial stormwater general permit.

I certify under penalty of law that there are no discharges of stormwater contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)).

I understand that I am obligated to submit a no exposure certification form once every five years to the Washington State Department of Ecology (Ecology) and, if requested, to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow Ecology to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under the industrial stormwater general permit prior to any changes at the facility that will result in exposure of stormwater to industrial activities.

Additionally, I certify under penalty of law that this application was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. I certify that:

I am either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship. (private sector business)

or

I am a principal executive officer or ranking elected official. (public sector government)

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

Title:

Signature:

Date:

APPENDIX H--RESPONSE TO COMMENTS

(to be added after May 17, 2002 close of comments)